THE DEVELOPMENT AND INITIAL VALIDATION OF THE

PRESCHOOL STRENGTHS INVENTORY

BY

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Abstract

Psychological assessment is a valuable tool that aids in the process of diagnosis, treatment, and the evaluation of outcomes in therapy. However, assessment has a long history of being skewed towards the negative aspects of human traits and functioning (Lopez & Snyder, 2003; Seligman & Csikszentmihalyi, 2000). There has been a shift in this practice, which includes a greater emphasis on the identification of positive characteristics and the balance of strengths and weaknesses (e.g., Linley & Harrington, 2006; Seligman, Steen, Park, & Peterson, 2005). This movement has made significant gains in the adult and adolescent literature, with the inclusion of multiple strength assessments and clinical interventions (Magyar-Moe, 2009). However, less attention has been given to children. As such, the purpose of this study was to create and begin validating a reliable measure of preschool-aged children's inter- and intra-personal strengths based upon a developmental framework. Four focus groups with parents (N= 16) of preschool-aged children (ages 3-5) and a thorough review of the literature were conducted to identify the strengths preschool-aged children possess. Following item development, the preliminary Preschool Strengths Inventory (PSI) was given to parents (N = 302) of preschool-aged children. An exploratory factor analysis showed five factors best represented the data, which included Strengths of Agreeableness, Strengths of Extraversion/Openness, Strengths of Conscientiousness, Leadership, and Organization. Factor loadings were strong, .50 or higher, with no cross loadings higher than .25. This model was confirmed using a confirmatory factor analysis, with strong internal reliability. The PSI is the first measure of its kind designed for preschool-aged children to identify internal strengths based on developmental literature. Limitations and future directions are discussed.

Acknowledgements

Growing up, I loved helping people and working with young children. Over time, I became curious about human nature and the relationships among people. As such, upon entering college at the University of Wisconsin –Stevens Point I declared a psychology major. There I met my former professor, mentor, and now friend, Dr. Jeana Magyar-Moe. Her enthusiasm, phenomenal teaching, and willingness to include me on her research team steered me towards Counseling Psychology and sparked my interest in positive psychology. In addition to Jeana, I owe sincere gratitude to a number of wonderful people in my life.

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Chapter I

Introduction

Psychology is not just the study of weakness and damage; it is also the study of strength and virtue. Treatment is not just fixing what is broken; it is nurturing what is best within ourselves. – Martin Seligman

Psychological assessment is a valuable tool that aids in the process of diagnosis, treatment, and the evaluation of outcomes in therapy. However, assessment has a long history of being skewed towards the negative aspects of human traits and functioning, and this still remains the current practice (Lopez & Snyder, 2003; Seligman & Csikszentmihalyi, 2000). The very definition of clinical psychology highlights its focus on pathology and problems. "Clinic" is defined as "medical practice at the sickbed," and psychology is "the science of the mind and behavior" (*Merriam-Webster's Collegiate Dictionary,* 2002). Thus, clinical psychology, from its inception, was focused on the study of mental infirmity.

By the 1950s, four assumptions regarding clinical psychology's state and breadth were established (Maddux, 2002). The first was that clinical psychology is interested in psychopathology, or abnormal, deviant, and maladaptive conditions. Second, there are several forms of psychopathologies that vary in their degree of expression. Third, psychopathology is parallel to biological and medical disease, and exists within an individual. Lastly, the clinician's role is to diagnose the disorder and prescribe a treatment to remediate the disorder.

These assumptions, and ultimately negative focus, are readily practiced in the field of clinical psychology and are reinforced through the framework and use of the Diagnostic and Statistical Manual of Mental Disorders (DSM; Lopez & Snyder, 2003; Seligman & Csikszentmihalyi, 2000). The DSM was first published in 1952 and is now in its sixth edition. It

began with 106 disorders that have grown to 297 (American Psychiatric Association, 2000). The diagnostic labels and categories that make up the DSM have been constructed by society (Maddux, 2002). Diagnoses are not "facts" about people, but rather a means to categorize characteristics that are viewed as "abnormal," that in turn are largely influenced by societal values. A prime example of this was the inclusion of homosexuality as a disorder in the first edition of the DSM and its later removal in 1973 (Maddux, 2002). Clinicians are typically trained to use the DSM in abnormal/psychopathology courses as well as in assessment courses. In addition, diagnosis is a common practice in the field, particularly with the influence of insurance. As a result, focusing on negative characteristics becomes inherent and perpetuates the cycle of focusing on negative or abnormal characteristics.

Pierce (1987) examined the impact negative information and the fundamental negative bias have on the assessment process. Research participants were asked to simulate the role of a counselor and their task was to identify what information they would like to know about their client "Joan." The participants were either told Joan was just released from a psychiatric ward (salient negative) or just graduated from college (salient positive), and she was experiencing anxiety about her future and life. The participants were instructed to choose 24 pieces of information from a list of 68 that they would like to learn more about. Half of these items were positive in nature (e.g., "Is Joan intelligent?") and half were negative (e.g., "Is Joan cruel?"). When the participants were presented with the "negative" description of Joan (psychiatric patient), more negative items were chosen, which suggests negative information was viewed as more relevant. This demonstrates that negative information tends to shadow other, more positive characteristics, and therefore, effort on the part of clinicians is necessary to overcome the fundamental negative bias.

Recognizing strengths can help clinicians assess areas that will provide the opportunity for clients to build upon their successes, cope with difficulties and deficiencies, and identify supports in their lives (Lopez & Snyder, 2003). In an attempt to conduct an even assessment as well as counter the biases negative information can have, Wright (1991; Wright & Lopez, 2002) advocated for an equal focus on strengths and weaknesses in the assessment process, including both individual and environmental factors. Wright proposed a four-front-approach that utilizes a 2x2 matrix of the content (liabilities and assets) and locus (person and environs). This approach recommends collecting an equal proportion of information that corresponds to each cell so a comprehensive, balanced assessment of clients can be conducted.

Although there are many clinical advantages for identifying disorders and impairments within individuals, as discussed, less attention is paid to the strengths an individual possesses and the impact they can have on daily functioning, growth, and recovery. The field of positive psychology has attempted to "even the field" by advocating for and conducting research in the area of strengths and optimal functioning (e.g., Linley & Harrington, 2006; Seligman, 1999). Research has shown that using and developing strengths has a positive impact across several domains. Intentional use of strengths increases happiness and decreases depressive symptoms (Seligman, Steen, Park, & Peterson, 2005), and increases hope, subjective and psychological well-being, confidence, and altruism (Hodges & Harter, 2005). In addition, life choices, self-confidence, goal-directed thinking, and interpersonal relationships are all positively influenced by using strengths. Many academic variables, such as students' grades, attendance, and productivity are increased by strength development as well. Similarly, using strengths affects occupational variables, such as increasing employee attendance, engagement, satisfaction, and productivity (Harter, Schmidt, & Hayes, 2002).

Clearly there is support for the use and development of strengths. However, the first step in this process is to identify and label strengths (Clifton, Anderson, & Schriener, 2006). Labels serve as a means to communicate an assumed, shared meaning. Labels also shape the way individuals view themselves or others, which can often lead to a self-fulfilling prophecy. When labeling only involves negative terms and identifiers, it can be detrimental to the individual because other, more positive characteristics can be overlooked or over-shadowed. Moreover, labels tend to "stick," and negative labels can create a stigma. However, if strengths are explicitly identified and labeled, this could counter or balance negative labels. Thus, emphasizing strengths, especially through naming, sets the groundwork necessary to implicitly suggest strengths are important and significant.

As noted, there are several reasons for and benefits of identifying and using strengths. Beginning this process at a young age would have many benefits, and there is some evidence doing so as young as two years old would have a meaningful impact (Owens, Phillippe, & Patterson, 2009; Park, 2004). Young children can show many strengths at a young age, such as caring (Dunn, Kendrick, & MacNamee, 1981), justice (Eckerman, Davis, & Didow, 1989), empathy, achievement-striving, open-mindedness, and nurturance (Owens et al., 2009). In addition, a study based upon parents' descriptions found that children as young as three years old expressed the strengths of love, kindness, and curiosity (Park & Peterson, 2006).

Identifying and fostering strengths is particularly important for young children. Brain plasticity, or the brain's ability to change and adapt as a result of experiences, is the basis of all learning and impacts the brain throughout various developmental stages (Eliot, 2009). However, children's brains are far more plastic than other stages in life. Therefore, exposing children to positive experiences, such as strength development, would be beneficial. In addition, although

strengths emerge and fade throughout the course of one's life, the most prominent strength identified in childhood consistently remains the individual's greatest strength (Owens et al., 2009). This suggests it is vital to foster children's strengths early in life and promote their development.

Once positive characteristics have been identified, the implementation and enhancement of those skills through interventions holds great potential for young children. Research supports the use of early intervention beginning at the preschool years across developmental domains (i.e., cognitive, social, and emotional; Nelson, Westhues, & MacLeod, 2003). Nelson and colleagues conducted a meta-analysis, which reviewed 34 preschool intervention programs for disadvantaged children. Cognitive functioning, social-emotional functioning, and parent-family wellness were assessed at three time periods (i.e., preschool, K-8, and high school and beyond). This was a rigorous meta-analysis in that only studies with comparison groups and longitudinal evaluations were included, the methodological evaluations of program quality were quantified, variables that could not be rated consistently were not included, and potential moderators were identified. Moreover, it included a unique feature relevant to positive psychology—only interventions for children who were *not* displaying problems were included. Therefore, conclusions can be drawn regarding how to facilitate positive development.

Results demonstrated that early interventions are successful and have long-term effects (Nelson et al., 2003). Specifically, interventions focusing on cognitive factors showed the greatest impact short-term, but demonstrated lasting, long-term effects as well. In addition, the interventions were most successful when they included a teaching component, begun before the age of three-years-old, and included follow-up in elementary school. In addition, socioemotional and parent-family wellness interventions were influential and consistent across ages.

Interventions typically aid in overcoming and the prevention of barriers, such as teen pregnancy, poor school performance, and delinquency (Peterson, 2003). However, "as researchers, we measure what is emphasized, and we emphasize what is measured" (Peterson, 2003, p. 5). Therefore, including strength identification and development into intervention programs will likely aid in the healthy, positive growth of individuals across ages.

Strengths can be measured and identified, and a number of strengths measures currently exist. The StrengthsFinder and the Values in Action Inventory are appropriate for the adult population (Snyder & Lopez, 2006). The Youth StrengthsExplorer is fitting for ages 10-14 (Lopez, Hodges, & Harter, 2005) and the Values in Action Inventory of Strengths in Youth (VIA-Youth) is suitable for ages 10-17 (Park & Peterson, 2006). A few measures exist for younger children, including the Search Institute's Developmental Assets (Benson, Leffert, Scales, & Blyth, 1998), the Behavioral and Emotional Rating Scale (Epstein & Sharma, 1998), the Child and Adolescent Needs and Strengths (Lyons, 1999), and the Devereux Early Childhood Assessment (DECA; LeBuffe & Naglieri, 1999).

It is clear that identifying (and enhancing) strengths is beneficial; however, there are many concerns regarding the theory (or lack thereof) underlying current measures as well as the lack of a clear conceptualization and the psychometrics of existing measures. In addition, current measures lack a comprehensive developmental framework. A developmental framework is vital when assessing children due to the continual growth children undergo (Kirschman, Johnson, Bender, & Roberts, 2009). In addition, observations and characteristics of adults are not necessarily parallel and comparable to children. As such, the purpose of this study was to create and validate a measure, the Preschool Strengths Inventory, in which inter- and intra-personal strengths can be reliably identified for preschool-aged children (ages 3-5) based upon

developmental theory. Due to the extensive nature of developing a comprehensive measure of individual strengths, which include physical, cognitive, interpersonal, and intrapersonal strengths, and in order to prevent attrition due to a lengthy item pool, this study focused on inter- and intra-personal strengths. It was hypothesized the inter- and intra-personal strengths identified would have adequate internal consistency and demonstrate validity through confirmatory factor analysis.

Chapter II

Literature Review

Several lines of literature were reviewed to inform the development of the Preschool Strengths Inventory (PSI). It was vital to have a clear definition and conceptualization of the construct "strengths" to allow for accurate measurement. Current measures of strengths for children were examined to determine their strengths and weaknesses to inform the development of the PSI. Finally, developmental literature involving intrapersonal traits, specifically the Big Five personality factors, and interpersonal skills, including social competence and prosocial behavior, were reviewed to identify the strengths preschool children possess.

Conceptualizing and Defining Strengths

Several models examine the influence of positive factors on outcomes, or strength-based assessment. The first includes examining psychological well-being through quality of life and happiness (Lucas, Diener, & Suh, 1996). The second examines traits within individuals that help cope with challenges and risks (Ewart, Jorgensen, Suchday, Chen, & Matthews, 2002). The third model involves protective factors that exist outside individuals (e.g., family functioning, community factors, peer relationships; Brown, D'Emidio-Casten, & Bernard, 2000) that help cope with challenges and risks. The last, and focus of this project, involves examining positive traits within individuals (e.g., Steen, Kachorek, & Peterson, 2003).

Different models offer various definitions and terms used to describe strengths and related constructs. These differ based upon the model and conceptualization they fall under. Terms commonly utilized include: assets, protective factors, character strengths, and strengths. Definitions of each term will be provided to help distinguish the difference between each construct and the operational definition of the construct "strength," as used in this study.

An asset, also commonly referred to as a "promotive" factor, is a "measurable characteristic of a group of individuals or their situation that predicts positive outcome with respect to a specific criterion. [It is] a predictor of positive outcome across levels of risk, statistically reflecting a positive association between the characteristic and the outcome, or an elevated probability of a desirable outcome" (Masten, Cutuli, Herbers, & Reed, 2009, p. 119). A protective factor is "a measurable characteristic of a group of individuals or their situation that predicts positive outcome in the context of risk or adversity" (Masten et al., 2009, p. 119).

Peterson and Seligman (2004) used a hierarchical classification of positive traits to define strengths. The broadest category, virtues, is defined as the "core characteristics valued by moral philosophers and religious thinkers: wisdom, courage, humanity, justice, temperance, and transcendence" (p. 13). Within virtues, character strengths are defined as, "the psychological ingredients—processes or mechanisms—that define the virtues," (p. 13). Most specifically, situational themes are "the specific habits that lead people to manifest given character strengths in given situations" (p. 14).

Strengths, under the conceptualization of Clifton and colleagues, are an extension of and develop from talents, or "naturally reoccurring patterns of thought, feeling, and behavior that can be productively applied" (Hodges & Clifton, 2004, p. 257). These talents stem from life experiences and yearnings. Strengths are the near-perfect performance of a task and are formed through the combination of one's talents, knowledge, and skills.

In an attempt to reconcile the definitions proposed by multiple individuals without a moral association, Linley and Harrington (2006) defined strengths as "a natural capacity for behaving, thinking, and feeling in a way that allows optimal functioning in the pursuit of valued outcomes" (p. 88). However, in order to encompass all facets of development and still refrain

from determining what is "moral" or "good" within a person, the term "strength" will be utilized with a modified definition from the conceptualization of Linley and Harrington (2006). A strength is a universal, natural, and positive trait or skill expressed intrapersonally, interpersonally, physically, or cognitively in a way that promotes optimal functioning.

The term "universal" infers strengths can be applied across settings and contexts (e.g., school, work, personally). Under the conceptualization of Linley and Harrington (2006), "natural" implies strengths are innate and influenced by one's environment. In addition, they are stable across the lifespan, but can be more or less developed as a result of one's experiences and environmental influences. Strengths have a range in which they can be developed, and this can be influenced by the opportunities accessible, frequency of use, and environmental influences. As such, individuals may possess a strength naturally, but not have adequate circumstances for it to reach its full potential.

Strengths can exist in all facets of life, and Linley and Harrington's (2006) conceptualization of strengths involves affect, behavior, and cognition—what they believe to be the basic components of human functioning. These three areas encompass motivation, attribution, and relation. However, the modified definition frames strengths as falling under the categories of cognitive, physical, interpersonal, and intrapersonal strengths in order to encompass all aspects of development.

Linley and Harrington (2006) suggest the primary purpose of strengths is "optimal functioning," which helps individuals reach their full potential. Moreover, strengths assist in achieving goals or "valued outcomes." Linley and Harrington's description of "valued outcomes" is meant to be interpreted in a broad sense, encompassing intrinsic and extrinsic motivations, as well as intra- and inter-personal goals. In addition, there are no objectively

"good" or "bad" outcomes by using strengths; they are judged by their concordance with the values of the individual. However, strengths can be expressed and used without a specific goal or motivation; therefore, this component of the definition is not necessary. For example, an individual can express kindness to a stranger by holding a door open without having a goal or motivation related to being kind to that individual. Rather, strengths are viewed as inherently positive—good, advantageous, or favorable—in nature.

In summary, in order to eliminate redundancy and clearly identify what is considered a strength, the current study proposed five criteria (parallel to the definition) to identify what is classified as a strength. Strengths: 1) are universal; 2) come naturally to the individual; 3) are positive in nature; 4) provide the opportunity for optimal functioning; and 5) are either a cognitive, physical, interpersonal, or intrapersonal trait or skill.

Current Measures of Strengths

Several measures exist that identify strengths. Each measure that is appropriate for children will be discussed in detail as well as the rationale behind creating a new measure independent of the existing measures.

The Clifton Youth StrengthsExplorer. The Youth StrengthsExplorer is appropriate for individuals ages 10-14 and strengths are identified by parent report (Lopez et al., 2005). This measure consists of 78 items and assesses 10 themes. These include: Achieving, Caring, Competing, Confidence, Dependability, Discoverer, Future Thinker, Organizing, Presence, and Relating. Individuals receive their top three themes ranked in order, descriptions of the themes, and action items that provide steps the child, teachers, and parents can take to help the child further develop their strengths. The remaining themes are not reported. The coefficient alphas range from .74 to .87, with over half the themes at .80, over 5-7 weeks. Acceptable construct

validity was reportedly demonstrated through factor analyses. Further validity tests are needed to examine convergent and discriminant validity (Lopez et al., 2005).

There are several reasons the StrengthsExplorer was not used as a model. First, underlying theory for the strengths identified is unclear. The original strength themes were reportedly created from four focus groups with parents of children and adolescents. These themes were then compared to the StrengthsFinder themes, which were also generated from qualitative interviews with students and employees, and also examined by factor analysis. The StrengthsExplorer technical report states construct validity was determined by factor analyses (Lopez et al., 2005); however, no data was provided to confirm this. In addition, as noted above, the manual states further validity is needed. Although the manual lists the range of coefficient alphas calculated for internal consistency, each alpha level was not reported. In addition, the manual only states "most test-retest correlations were above .60." The standard, acceptable coefficient level in the field is typically .70 (Nunnally, 1978). Overall, the way in which this measure was created is not tied to theory and it is unclear whether this instrument is technically sound. Therefore, it does not serve as a useful model or framework to create a strengths measure for preschool children.

The Values in Action – Youth (VIA-Youth). The VIA-Youth is a self-report measure that consists of 194 questions. The VIA-Youth is appropriate for individuals ages 10-17 (Park & Peterson, 2006). The measure identifies 24 character strengths under six broad virtues. The virtues include: Wisdom and Knowledge, Courage, Humanity, Justice, Temperance, and Transcendence. The strengths that belong under the Wisdom category include: Creativity, Curiosity, Love of Learning, Open-mindedness, and Perspective. Courage includes: Authenticity, Bravery, Persistence, and Zest. Kindness, Love, and Social Intelligence fall under the Humanity

category; Fairness, Leadership, and Teamwork fall under the Justice category. The Temperance category includes: Forgiveness, Modesty, Prudence, and Self-regulation. Lastly, the Transcendence category includes: Appreciation of Beauty and Excellence, Gratitude, Hope, Humor, and Religiousness (Park & Peterson, 2006). Seven to nine items for each character strength are placed in a nonsystematic order. The items are age-appropriate and utilize simple language and no metaphors or idioms. In addition, references were made to school, family, and friends, which would be familiar to the age group. Exploratory factor analysis led to four subscales: temperance strengths, intellectual strengths, theological strengths, and other-directed (interpersonal) strengths.

The VIA-Youth shows good internal consistency across all subscales with coefficient alphas ranging from .72 to .91, with six-month test-retest ranging from .46 to .68 (Park & Peterson, 2006). Convergent validity was determined by comparing student's homeroom teachers' ratings to the participants, with correlations ranging from .14 to .33. Most correlations were positive, but not always significant. Construct validity was established through correlations with the Student's Life Satisfaction Scale (SLSS; Huebner, 1991), grade point average, popularity scores, the Social Skills Rating System (SSRS; Gresham & Elliot, 1990), the Child Behavior Checklist (CBCL; Achenbach, 1991), and parent or guardians' scores on the Values in Action Inventory of Strengths. All correlations were positive. Further, exploratory factor analysis was conducted with the Big Five personality factors (Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness; see the *Personality Development* section below**)**, with positive correlations (Park & Peterson, 2006).

Although this instrument is technically sound and utilizes developmentally appropriate items (Park & Peterson, 2006), the rationale behind diverging from the structure of the VIA-

Youth is the philosophical and religious underpinnings the measure is based upon. As discussed above, this instrument measures "character," which is defined as "positive traits that have emerged across cultures and throughout history as important for the good life" (Park & Peterson, 2006, p. 893). The character traits fall under six broad "virtues," which are the "core characteristics valued by moral philosophers and religious thinkers" (p. 893). These virtues include: wisdom, courage, humanity, justice, temperance, and transcendence. Overall, this measure relies heavily on moral judgments and religious values, which is outside the scope of interest (a developmental framework).

The Search Institute's Developmental Assets. The Search Institute's Developmental Assets consists of 40 qualities that identify contributors to positive youth development (Benson et al., 1998). The survey is made up of 156 items and includes eight thriving factors, five developmental deficits, and 24 risk-taking behaviors. There are 20 external assets that include experiences children gain through interaction with people and institutions. These include four subcategories: Support, Empowerment, Boundaries and Expectations, and Constructive Use of Time. There are also 20 internal assets that focus on personal characteristics and behaviors. These include four subcategories: Commitment to Learning, Positive Values, Social Competencies, and Positive Identity. There is little information about its psychometric properties available to the public (Snyder & Lopez, 2006).

Although this measure is reportedly appropriate for children, the exact age range and the psychometric properties are unknown. In addition, the purpose of this study is to identify and measure internal strengths only, not external/environmental strengths, deficits, or risk-taking behaviors. Therefore, it too does not serve as a useful model for creating a strengths measure for preschool children.

Preschool Behavioral and Emotional Rating Scale – 2. The Preschool Behavioral and Emotion Rating Scale (PreBERS) consists of 42 items that are completed by preschool teachers (Epstein, Synhorst, Cress, & Allen, 2009). The PreBERS assesses four areas of emotional and behavioral strengths in young children ages three to five: Emotional Regulation, School Readiness, School Confidence, and Family Involvement. A total raw score for each subscale can be calculated by adding the scores for items in each category. The four areas assessed were determined by several steps: 1) Original items from the Behavioral and Emotional Rating Scale (Epstein, 2004; Epstein & Sharma, 1998) were rated; 2) A review of the literature on social-emotional development of children ages three to five years and other assessments measuring social and behavioral development of preschool children were conducted; 3) A study was conducted to determine if items would discriminate between children with or without disabilities; and 4) An exploratory factor analysis was conducted. The coefficient alphas measuring internal consistency range from .84 to .98 for all the subscales (Epstein et al., 2009). Test-retest reliabilities range from .86 to .93 (Epstein & Synhorst, 2008). Inter-rater reliabilities between teacher and parent ratings were all above .73 and significant ($p < .001$; Epstein & Synhorst, 2008). Criterion validity was determined by assessing children with and without disabilities—all subscales were significantly different between the groups ($p < .001$; Epstein et al., 2009).

This measure is appropriate for the age range of interest (age three to five) and the psychometric properties are sound. However, the strengths measured by this instrument fall into categories outside of the areas of interest (intra- and inter-personal strengths). Therefore, this measure does not serve as a comprehensive model for creating a measure of strengths for preschool children.

Devereux Early Childhood Assessment. The Devereux Early Childhood Assessment (DECA; LeBuffe & Naglieri, 1999) is based upon the resilience literature and measures within-child protective and risk factors for children between the ages of two and five (Reddy, 2007). The test is recommended to be completed by parents, teachers, and/or childcare workers. It consists of 37 items that make up two composite scales—Total Protective Factors and the Behavioral Concerns. The Total Protective Factors can be broken down into three factorially derived subscales: Initiative, Self-Control, and Attachment, while the Behavioral Concerns consists of one scale score. Scores are grouped into three categories: concern, typical, and strength. The Protective Factors Scales have been normed on a national standardization sample of 2,000 preschool children and the Behavior Concerns Scale was normed on a national, standardized sample of 1,108 preschool children ages 2:0 to 5:11.

The internal reliability coefficients for parents were .91 for the Total Protective Factors Scales and .71 for the Behavioral Concerns Scale (LeBuffe & Naglieri, 1999). For teachers, the internal reliability coefficients were .94 for the Total Protective Factors Scales and .80 for the Behavioral Concern Scale. For parents, the test-retest reliability coefficients ranged from .55 to .80; for teachers, it ranged from .68 to .91. Inter-rater reliability coefficients were measured for three pairs (parent to parent, teacher to teacher, and parent to teacher). Coefficients ranged from .21 to .44 for parent-to-parent comparisons, .57 to .77 for teacher-to-teacher comparisons, and .19 to .34 for parent-to-teacher comparisons. Internal reliability coefficients ranged from .66 to .78 for parents and .80 to .90 for teachers. Content validity was obtained through a comprehensive review of the literature and focus groups with parents and teachers. LeBuffe and Naglieri (1999) report strong construct and criterion validity. Factor analysis was used during item formation and factor loadings of .34 were found for the Protective Scales; however, the

factor loadings from the Behavior Concerns Scale were not provided. The scales were found to differentiate 95 preschool children with documented emotional and behavioral problems from 86 preschoolers with no documented emotional and behavioral problems ($p < .01$; LeBuffe & Naglieri, 1999).

This measure is appropriate for the age range of interest (ages 3 to 5), the majority of psychometric properties are sound, and it measures internal strengths. However, the items were based on the resilience literature, which differs from a developmental framework, and its factors are outside the scope of interest. Therefore, this measure does not serve as a useful model for creating a measure of intrapersonal and interpersonal strengths for preschool children that encompasses a developmental framework.

A Developmental Conceptualization

When examining reviews of developmental psychology as a field, several broad categories are consistent across the decades. These include: cognition, social functioning, and personality development (Flavell & Hill, 1969; Hartup & Yonas, 1971; Inhelder, 1956; Lipsett & Eimas, 1972; Masters, 1981; Stevenson, 1967). Physicality is also an important facet of development (Feldman, 2008), but is less often studied by developmental psychologists. Although each of these areas are vital to children's development, the focus of this study will only include the assessment of intrapersonal and interpersonal strengths because they are most related to one another and will allow for an adequate number of items for each strength to be generated without too much attrition due to instrument length.

Intrapersonal Strengths

Personality development. Historically, the definition of "personality" has varied and is not always agreed upon (Pervin, 1990). There appears to be a general consensus that individual

differences and the organization of component parts that make up a whole person are core aspects of the definition of personality (Pervin, 1990). Further, when examining personality traits, or the characteristics that make up personality, there are two key assumptions—traits are stable over time and traits influence behavior (Matthews, Deary, & Whiteman, 2003). These personality traits are viewed on a continuum (Oldham & Morris, 1995). For example, Extraversion describes the degree in which an individual engages with or avoids the world. In other words, people are often described with the adjectives "extraverted" or "introverted," which gives an indication of what end of the continuum they fall on the personality trait of Extraversion.

In regards to individual differences, personality is typically studied in adults, while temperament is more often studied in young children. Temperament can be defined as "individual differences in reactivity and self-regulation in the domains of affect, activity, and attention," (Rothbart & Bates, 2006, p. 100). In contrast to temperament, personality is typically viewed as including a larger range of individual differences and consists of higher-level traits (Caspi & Shiner, 2006).

Across the personality literature, behavioral characteristics are organized hierarchically throughout the lifespan. Lower-order traits consist of specific characteristics people exhibit when thinking, feeling, or behaving (e.g., helpfulness, organization), whereas higher-order traits include a number of lower-order traits that covary with one another (e.g., Agreeableness and Conscientiousness). Individual differences with these traits are apparent beginning in infancy and continue throughout the lifespan (Digman, 1990; Shiner & Caspi, 2003). Since personality traits cover a wide range of diverse characteristics and are largely stable throughout the lifespan, positive personality traits would serve as useful descriptors of strengths.

There is a large consensus and a great deal of empirical support that personality can be divided into a five-factor (higher-order trait) model, often referred to as "The Big Five" (Digman, 1990). Although a number of independent investigators have found five factors when analyzing personality, there is not a consistent set of identical dimensions that make up the five-factor model. A model that has received a great deal of empirical support and has a widely used measure (Neuroticism-Extraversion-Openness Personality Inventory—Revised, NEO-PI R) is that of Costa and McCrae (1992). This model is divided into five broad dimensions, which were developed partially from rationale and partly through factor analysis. The five dimensions include: Neuroticism (N), Extraversion (E), Openness (O), Agreeableness (A), and Conscientiousness (C; see below for definitions). The individual, lower-order traits measured by the NEO-PI R that fall under each dimension can be seen in Table 1.

Research by developmental psychologists has supported the notion that adult personality dimensions align with children's personality factor structure (Caspi & Shiner, 2006). Factor analyses from questionnaires and adjective checklists, behavioral tasks, and observation measures have all produced factor structures similar to the Big Five traits. The five factors have been produced from both parent (e.g., Barbaranelli, Caprara, Rabasca, & Pastorelli, 2003; Halverson et al., 2003; Lamb, Chuang, Wessels, Broberg, & Hwang, 2002) and teacher (e.g., Barbaranelli et al., 2003; Goldberg, 2001) reports.

The "Big Five" factors.

Neuroticism. Neuroticism is "the extent to which the person experiences the world as distressing or threatening" (Caspi & Shiner, 2006, p. 306) and involves a predisposition towards negative emotion and distress. Neurotic traits involve the inability to self-regulate and cope with negative emotions. Children and adolescents high in Neuroticism are typically described as

"anxious, vulnerable, tense, easily frightened, 'falling apart' under stress, guilt-prone, moody, low in frustration tolerance, and insecure in relationships with others" (p. 313).

In general, common lower-order traits of Neuroticism include fear, anxiety, and sadness (Barlow, 2000; Chorpita, Albano, & Barlow, 1998; Muris, Schmidt, Merckelbach, & Schouten, 2001). Fear involves negative affect and physical symptoms that arise from actual or imagined dangers. Anxiety manifests with apprehension, distress, worry, and physical tension under situations with no immediate threat. Sadness involves depression, such as low mood, hopelessness, and dejection. Neuroticism is largely characterized by the lower-order trait of anxiety (Caspi & Shiner, 2006).

It is believed Neuroticism is part of an underlying personality dimension that includes self-esteem, locus of control, and self-efficacy (Judge, Erez, Bono, & Thoresen, 2002). Children high in Neuroticism are more likely to be self-critical, express self-pity and guilt, be insecure, and appear physically tense (Markey, Markey, & Tinsely, 2004).

Extraversion. Extraversion is described as "the extent to which the person actively engages the world or avoids intense social experience" (Caspi & Shiner, 2006, p. 306). Extraverts experience a great deal of positive emotions (Watson & Clark, 1997) and are high in energy and sociability (Caspi & Shiner, 2006). Children and adolescents high in Extraversion are typically described as "sociable, expressive, high spirited, lively, socially potent, physically active, and energetic" (p. 311). In addition, leadership is another characteristic extraverted children often possess (Morison & Masten, 1991).

Lower order traits specific to Extraversion can be classified as sociability and energy/activity level (Caspi & Shiner, 2006). Sociability is described as a desire to interact with others and seeking out the company of others (Halverson et al., 2003). High activity level is

another characteristic of Extraversion that is especially prevalent in young children; it appears around age two to three (Halverson et al., 2003). Social dominance, which is believed to contribute to leadership skills when expressed in a positive manner, is another possible component of Extraversion that needs further research (Caspi & Shiner, 2006).

Children high in Extraversion experience a number of benefits. When engaging in characteristics of Extraversion (e.g., sociability, high energy), children experience a great deal of positive emotion (Fleeson, Malanos, & Achille, 2002). It is believed the positive interaction that takes place with others, which is common in extraverts, contributes to the experience of positive emotions (Caspi & Shiner, 2006). Extraverts are also more capable of extending periods of positive emotion compared to introverts (Hemenover, 2003).

Openness to Experience. Openness to Experience is "the complexity, depth, and quality of a person's mental and experiential life" (Caspi & Shiner, 2006, p. 307). Although this trait possesses a number of unique and beneficial characteristics, it is the least understood and most debated of the Big Five factors. Children who are open to experience are described as "eager and quick to learn, clever, knowledgeable, perceptive, imaginative, curious, and original" (p. 323). Research has demonstrated this trait can be reliably measured by six to seven years old.

Lower-order traits of Openness to Experience are unclear given the limited research on this factor. However, intellect (Halverson et al., 2003), curiosity, and creativity (Goldberg, 2001) are likely candidates.

The developmental literature is less clear regarding Openness to Experience; however, there is support that positive emotions predict Openness (Abe & Izard, 1999). Active exploration and positive emotions are believed to be precursors to both Openness and Extraversion, and these two higher-order traits covary consistently across the lifespan. Open individuals experience

a number of benefits, including greater access to thoughts and feelings, and the ability to experience greater awareness (McCrae & Costa, 1997). In addition, they are more motivated to seek out new experiences and learn new things (Caspi & Shiner, 2006).

Agreeableness. Agreeableness "describes a person's interpersonal nature on a continuum from warmth and compassion to antagonism" (Caspi & Shiner, 2006, p. 307). Agreeableness consists of a variety of characteristics important to the expression of prosocial characteristics as well as the ability to build strong relationships. These skills are important to the development of children; however, the higher-order trait of Agreeableness is often not included in temperament models. Characteristics that fall under the trait of Agreeableness include: "warm, considerate, empathic, generous, gentle, protective of others, and kind" (Caspi & Shiner, 2006, p. 320). Traits of Agreeableness used to specifically describe children and adolescents include the ability to comply with others' requests, be manageable by adults, seek agreement from parents, and express warmth and agreeableness.

Lower-order traits associated with Agreeableness in children include prosocial tendencies, antagonism, and willfulness (Caspi & Shiner, 2006; Prosocial skills will be discussed below.) Antagonism ranges from being peaceful and gentle to aggressive and quarrelsome, with the latter on the high end. Children who exhibit high antagonism engage in both physical and relational aggression. Willfulness is the degree an individual exhibits assertive behavior towards others (Halverson et al., 2003). Children high in willfulness are often difficult for adults to manage. Other characteristics that are potentially lower-order traits of Agreeableness are modesty (Peabody & De Raad, 2002; Saucier & Ostendorf, 1999) and integrity (Peabody & De Raad, 2002).

Agreeableness relates to an individual's desire to promote positive relationships with others (Graziano & Eisenberg, 1997; Graziano, Hair, & Finch, 1997; Jensen-Campbell & Graziano, 2001). One contributing factor to maintaining relationships is the ability to manage conflict appropriately and effectively. Agreeable children and adolescents are more likely to report using constructive techniques when conflict arises with others (Jensen-Campbell & Graziano, 2001; Jensen-Campbell, Gleason, Adams, & Malcolm, 2003), whereas children low in Agreeableness are more likely to engage in destructive behaviors (e.g., manipulation, coercion) when in conflict (Graziano, Jensen-Campbell, & Hair, 1996; Jensen-Campbell et al., 2003). Another contributing factor to maintaining relationships is the ability to self-regulate emotions (Graziano & Eisenberg, 1997). Specifically, Agreeableness is negatively predicted by early differences in irritability and frustration and positively predicted by attention and self-control (Kochanska, Murray, & Harlan, 2000; Laursen, Pulkkinen, & Adams, 2002; Rubin, Burgess, Dwyer, & Hastings, 2003). In addition, positive emotions and sociability are associated with prosocial behavior in children (Graziano & Eisenberg, 1997), which aids in the formation and maintenance of relationships.

Conscientiousness. Caspi and Shiner define conscientiousness as "the extent and strength of impulse control in task-focused domains" (p. 306). Traits used to describe Conscientious children and adolescents include, "responsible, attentive, persistent, orderly and neat, planful, possessing high standards, and thinking before acting" (p. 306). It is less common for parents to describe three-year-old children as Conscientious, but this steadily increases as the children age between three and six years old (Slotboom, Havill, Pavlopoulos, & De Fruyt, 1998). In addition to the attention and impulse control characteristics emphasized in temperament models,

personality models include additional traits, such as orderliness, dependability, and motivation to reach goals and complete tasks (Caspi & Shiner, 2006).

The lower-order traits that constitute Conscientiousness include "attention, self-control, achievement motivation, orderliness, and responsibility" (Caspi & Shiner, 2006, p. 317). Attention refers to the child's ability to focus, regulate attention, and focus on tasks regardless of distractions. Self-control involves being planful, cautious, deliberate, and exhibiting control. Achievement motivation, or industriousness, refers to consistently striving to achieve high standards, working hard, being productive, being goal-orientated, and being persistent and determined (Peabody & De Raad, 2002; Roberts, Bogg, Walton, Chernyshenko, & Stark, 2004). Orderliness, or organization, describes the tendency to be neat, organized, and clean (Halverson et al., 2003; Roberts et al., 2004). Responsibility describes the tendency to be reliable and dependable (Goldberg, 2001; Peabody & De Raad, 2002; Roberts et al., 2004).

Individual differences in attention usually surface in infancy, and persistence and self-control are stable by the preschool years (Kochanska et al., 2000). Children experience a number of benefits from Conscientious traits. They exhibit a greater degree of energy in task completion, they tend to follow through, and maintain order (Ashton & Lee, 2001). Conscientiousness in childhood predicts later intrinsic and extrinsic career success as an adult (Judge, Higgins, Thoreson, & Barrick, 1999). Childhood Conscientiousness also predicts intelligence, social skills, warmth, likeability, and cheerfulness (Markey et al., 2004) as well as social competence and following rules (Lamb et al., 2002).

Interpersonal Strengths

Several strengths individuals possess involve interaction with others. From a developmental perspective, social behavior is termed "social development," which is comprised

of externalizing and internalizing behavior problems, social competence, and prosocial behavior (Sanson, Hemphill, & Smart, 2004). Externalizing and internalizing behavior problems will not be discussed, as behavior problems do not meet the criteria proposed to be considered a strength.

From two to five years old, young children become more skilled with social interaction. Throughout early childhood, interactions with others and the complexity of those interactions increase and reach a greater level of maturity (Rubin, Bukowski, & Parker, 2006). Playing with others largely contributes to young children's social skill development. They acquire the ability to observe other children playing, approach others and play beside them (parallel play), and eventually engage with the other children in the ongoing activity. By age three, children are able to share symbolic meaning through social pretense (Howes, 1988), which enables children to interact with one another through the use of imagination in a meaningful way. As children grow older, they are able to negotiate during play (Goncu, 1993). During this time, preschool-aged children also learn to adapt their speech according to their peers' needs (Shatz & Gelman, 1973). Prosocial behavior (e.g., helping, sharing) is exhibited more often as well (Eisenberg, Fabes, & Spinrad, 2006).

Social competence. Social competence has been defined in a number of ways and is often interchanged with the term social skills (Nangle, Grover, Holleb, Cassano, & Fales, 2010; Rose-Krasnor, 1997). Generally, social competence is defined as the collection of social skills that allows individuals to interact successfully in social settings (Feldman, Philippot, & Custrini, 1991; Feldman, Tomasian, & Coats, 1999).

Waters and Sroufe (1983) contend social competence is best understood through a developmental lens, as the social skills and competence one possesses are vastly different throughout various life stages. What is appropriate and expected in infancy, for instance, differs

significantly from what is expected from an adolescent. In the past, social competence has been defined either through a broad conceptualization or by specific characteristics. A broad conceptualization can be useful in that it provides a general understanding of the construct, but does not take into account the varying situations and ages (Waters & Sroufe, 1983). Waters and Sroufe suggest measuring abilities specific to the age group of interest, and in the case of preschool-aged children, assessing their ability to not only interact with others, but also learn from their peer group.

Similar to the definition of social competence, many models exist to describe the complexity of social competence (see Nangle et al., 2010 for a review). Most relevant in assessing specific social skills is Rose-Krasnor's (1997) Social-Emotional Competence multilevel model. This model is built off a global definition of social competence—an overall *effectiveness in interaction*. This definition is theoretical in nature because it cannot be boiled down to a single behavior, and it assumes social competence can be transferred across contexts and is unique to the individual. This model posits the two developmental tasks that are vital to the development of social competence are successful, independent interaction with peers and the ability to regulate emotions and expressiveness. Therefore, according to this model, social competence is achieved by positive engagement with peers while successfully regulating emotions (Howes, 1987a; Waters & Sroufe, 1983).

At the very top of the prism model is the *effectiveness in interaction,* which is achieved through success in the preceding levels (Rose-Krasnor, 1997). The middle level is comprised of intrapersonal and interpersonal goals, including group status (e.g., popularity), relationship quality with adults and peers, and self-efficacy. The bottom level, or *skills level,* consists of specific abilities. These include self-regulation (emotional and behavioral), social awareness

(perspective taking and emotion understanding), social problem solving (strategy repertoire, outcome evaluation, and response to failure), and prosocial orientation (prosocial behavior, prosocial reasoning, and moral reasoning). These specific abilities are believed to represent the skills necessary to be successful at the middle level in building relationships, one's group status, and self-efficacy. As seen, this model suggests social competence is acquired through a series of steps, which begins at a basic, individual skill level.

Social competence provides a number of benefits to young children. During early childhood, children become more skilled at creating and maintaining relationships with peers (Howes, 1987b) and at communicating and coordinating their actions with others (Howes, 1988). They are also able to adjust their emotions and behaviors according to their peers and are typically positive in their interactions with others (Howes, 1987a).

Prosocial behavior. Prosocial behavior is generally defined as voluntary behavior intended to benefit others (Eisenberg, 1986). Prosocial behavior, from infancy to early childhood, can be classified into three categories: *feelings for another* (e.g., empathy, friendliness), *working with another* (e.g., cooperation, sharing), and *ministering to another* (e.g., comforting, providing resources to another; Hay & Cook, 2007). Specific traits identified under the umbrella of prosocial behavior include: altruism, empathy, sympathy, sharing, helping, warmth, sociability, cooperation, accepting, emotional regulation, and emotionally positive (Eisenberg et al., 1999; Eisenberg, et al., 2006).

Hoffman (2001) proposed a five-level theoretical model of prosocial behavior. This model outlines the shift from self-concern to empathic concern for others, which leads to prosocial behaviors. In the first stage, which Hoffman calls the *global empathic distress*, infants cry in response to other infants' cries. It is not a simple reaction or imitation, but matches the

intensity of the other infants' distress, and thus an empathic response. Infants do not possess a self-other differentiation, and therefore, exhibit empathy through simpler forms (e.g., reactive crying). Due to the lack of self-other differentiation, infants experience self-distress in reaction to others' distress. In the second stage, called *egocentric empathic distress*, infants still respond with global empathic distress, but also begin to seek comfort in reaction to others' distress. This reaction suggests infants are beginning to develop a sense of self apart from others. In the third stage, *quasi-egocentric empathic distress,* infants begin to give helpful gestures to those in distress, such as touching, hugging, kissing, reassuring, advising, and getting others to help. During this stage, they are capable of distinguishing the difference between themselves and others, but struggle to understand the difference between their internal states and others'. At this stage, infants seek to comfort others, but may do so by providing what they would find comforting. In the fourth stage, *veridical empathy for another's feeling,* during the toddler's second year, they become increasingly aware of other people's feelings and begin to understand others may not feel the same as they do. As a result, toddlers exhibit more accurate empathic responses, and with greater language capabilities they are able to understand a greater variety and number of emotions. In the fifth stage, *empathic distress beyond the situation,* older children become capable of thinking abstractly and can experience empathy even when others are not present. By mid-childhood, children can empathize with the general condition or distress another experiences. By adolescence, empathy for an entire group (e.g., low socio-economic status) can be experienced.

Empirical evidence supports Hoffman's theory. Prosocial behaviors first become apparent in infancy, which is demonstrated by infants' responsiveness to the emotional responses of others. Several studies have demonstrated infants cry in response to other crying infants, an

example of global empathy (Martin & Clark, 1982; Sagi & Hoffman, 1976). It is clear infants' responses to others goes beyond a simple reaction or mimicry. Infants experience a greater degree of distress in reaction to other infants' cries than their own (Dondi, Simion, & Caltran, 1999). By six months old, infants will at times respond to others infants' cries by crying or directing behaviors toward their peers (e.g., leaning, touching; Hay, Nash, & Pedersen, 1981). Nine-month old infants become more responsive to others' emotions (Termine & Izard, 1988). Between 14 and 20 months, infants clearly respond to negative emotions expressed by others through orienting and distress reactions. During this period, they also respond to others' distress with attention and prosocial behavior (e.g., positive contact and verbal reassurance; Zahn-Waxler, Robinson, & Emde, 1992). These behaviors have been observed among a variety of individuals, including mothers (Zahn-Waxler, Robinson et al., 1992), siblings (Dunn, 1988), peers (Howes & Farver, 1987), and strangers (Johnson, 1982).

As infants enter into their second year of life, they begin to discuss emotions they experience and the emotions others experience. This skill evolves as language progresses between 18 and 36 months (Bretherton, Fritz, Zahn-Waxler, & Ridgeway, 1986). By the age of three, children possess many advanced skills related to prosocial behaviors. For example, children possess knowledge of how to care for others and how to respond to distress. Children are able to hold mutual conversations and have an understanding of reciprocity norms when playing and working with others. They are also capable of making verbal references to emotion and expressing sympathy (Hay & Cook, 2007).

Although children in the preschool years begin to exhibit prosocial behaviors, their response to the distress of others still varies (Murphy, 1937; Zahn-Waxler, Radke-Yarrow, Wagner, & Chapman, 1992). Some children react with non-prosocial responses, such as

laughing, aggression, or ignoring, while others respond in prosocial ways (e.g., helping, comforting). So although children are capable of prosocial behavior at this age, there is a large degree of variability in their expression of it. Specifically, it has been shown that the length of time children's peers are in distress and whether the peer in distress exhibits this behavior infrequently contributes to prosocial behaviors shown. As children grow older, the frequency of prosocial behavior increases (Benenson, Markovits, Roy, & Denko, 2003; van der Mark, van IJzendoorn, & Bakermans-Kranenburg, 2002), and as young children age, they are more likely to respond to others' distress with empathy and prosocial behavior (Hastings, Zahn-Waxler, Robinson, Usher, & Bridges, 2000).

To examine the many studies involving prosocial behavior and age, a meta-analysis was conducted (Eisenberg & Fabes, 1998). There were significant increases in prosocial behavior over time in the infant group (less than three years) and the preschool group (three to six years). In addition, when preschool-aged children were compared to children and adolescents, a significant increase was observed as well. However, although prosocial behaviors increase in the early years of life, eventually they become more stable as children become older. Independent ratings showed children's helping behaviors in kindergarten were comparable to when they completed elementary school (Côté, Tremblay, Nagin, Zoccolillo, & Vitaro, 2002).

Many skills acquired as a child are believed to be related to prosocial behaviors. From infancy through childhood, children become more skilled at perspective taking and skills related to prosocial abilities. Specifically, they develop a greater understanding of others' emotions and cognitive processes and become more skilled at decoding emotional cues (see Eisenberg, Murphy, & Shepard, 1997 for a review). Further, as children age, they become more skilled at understanding social cues (Pearl, 1985). Several cognitive factors appear to contribute to

prosocial behavior in young children as well. Toddlers who are aware of the self-other distinction are more likely to be empathic and display prosocial tendencies (Zahn-Waxler, Radke-Yarrow et al., 1992). Perspective taking, demonstrated by hypothesis testing or social referencing at age two as well as four to five, is positively related to prosocial behavior. In addition, preschoolers' knowledge of emotions is positively related to prosocial behavior. Specifically, children who possess knowledge of emotions show prosocial behavior in reaction to adults who express negative emotion (Denham & Couchoud, 1991) and younger siblings (Garner, Jones, & Palmer, 1994).

Prosocial behaviors often correlate with a number of socially appropriate behaviors across contexts. Prosocial children tend to be viewed as socially skilled and constructive copers (Eisenberg, Fabes, Karbon et al., 1996; Eisenberg, Guthrie et al., 1997; Peterson, Ridley-Johnson, & Carter, 1984). They also are cooperative (Dunn & Munn, 1986) as well as sympathetic and empathetic (Murphy, Shepard, Eisenberg, Fabes, & Guthrie, 1999). In addition, prosocial behaviors have been correlated to social problem-solving skills (Marsh, Serafica, & Barenboim, 1981; Warden & Mackinnon, 2003).

Prosocial behaviors are related to a number of positive characteristics as well. Children who are prosocial often tend to be assertive (Barrett & Yarrow, 1977; Denham & Couchoud, 1991), empathic (Eisenberg et al., 1990), and are more likely to help and share without being asked (Eisenberg, Pasternack, Cameron, & Tryon, 1984). They also tend to be well-regulated and low in impulsivity (e.g., Eisenberg, Fabes, Karbon et al., 1996; Eisenberg, Guthrie et al., 1997; Moore, Barresi, & Thompson, 1998). Likewise, sympathy has been positively related to regulation (Eisenberg, Fabes, Murphy et al., 1996; Murphy et al., 1999). Prosocial behavior is also related to positive emotionality (e.g., love, happiness; Denham, 1986) and negatively related

to negative emotionality (e.g., anger, fear, anxiety; Eisenberg, Fabes, Karbon et al., 1996; Denham, 1986).

Likewise, prosocial behaviors are linked to positive relationships with others. Children who display prosocial behavior are likely to demonstrate positive social interactions with their peers (Farver & Branstetter, 1994; Howes & Farver, 1987). Preschoolers who demonstrate prosocial behavior are likely to have more friends and closer friends (Clark & Ladd, 2000; Farver & Branstetter, 1994; McGuire & Weisz, 1982) as well as more supportive peer relationships (Sebanc, 2003). They are also more likely to be considered popular (Clark & Ladd, 2000; Coleman & Byrd, 2003; Dekovic & Gerris, 1994; Keane & Calkins, 2004), receive prosocial actions from peers (Persson, 2005), and have less conflict with peers (Dunn, Cutting, & Fisher, 2002).

Conversely, children who exhibit prosocial behaviors are low in aggression and externalizing behaviors (Caprara, Barbaranelli, Pastorelli, Bandura, & Zimbardo, 2000; Keane & Calkins, 2004). Specifically, children who express empathy (Albiero & Lo Coco, 2001; Braaten & Rosen, 2000; Cohen & Strayer, 1996; Endresen & Olweus, 2001; Strayer & Roberts; 2004; Warden & Mackinnon, 2003) and sympathy (Eisenberg, Fabes, Murphy et al., 1996; Laible, Carlos, & Raffaelli, 2000; Murphy et al., 1999; Zahn-Waxler, Cole, Welsh, & Fox, 1995) partake in fewer externalizing problems. Prosocial children are also more likely to view aggressive behavior negatively (Nelson & Crick, 1999).

Summary

Identifying strengths, particularly at a young age, has many benefits. A few measures currently exist with the purpose of identifying strengths in children; however, there are many concerns regarding the theory (or lack of theory) utilized and the psychometrics and organization

of these measures. In addition, currently no measure utilizes a developmental framework, which is particularly important for research with young children and is useful for examining development across the lifespan. To complicate the matter further, there are several conceptualizations and definitions of strengths. Thus, a refined definition based upon Linley and Harrington's (2006) with a developmental framework was used in this study. The broad areas identified as core constructs within developmental literature are cognition, physicality, intrapersonal traits (personality traits), and interpersonal traits (social skills). Several individual characteristics within the broad categories of inter- and intra-personal traits were identified from the literature that meet the criteria for being identified as a strength. Those characteristics were used to create and validate a reliable measure of strengths for preschool-aged children based upon a developmental framework.

Chapter III

Methods

The purpose of this study was to create and validate a reliable measure of inter- and intra-personal strengths possessed by preschool-aged children, as perceived by their parents. This was accomplished by conducting focus groups and surveying the literature to determine strengths preschool-aged children possess, developing items, and administering the initial PSI online to parents of children between the ages of three and five. The methodology for this study will be discussed, including the description of the sample, instrumentation, and procedures involved in the development of the PSI.

Participants

Focus groups. Sixteen parents (11 females, 6 males) of preschool-aged children (ages 3-5; M = 3.60, SD = .87) participated in one of four focus groups. The mean parent age was 36.94 (SD = 6.27). The sample consisted of 70.6% Caucasian, 5.8% African American, 11.8% Asian, and 11.8% of another race (for both children and parents).

Instrument development sample. Three-hundred and two parents (154 mothers and 148 fathers) of young children were recruited to participate. A nearly equivalent mother-father sample was acquired to ensure both mothers and fathers could complete the finalized instrument without a potential gender bias. Given the emphasis on interpersonal strengths in the creation of the Preschool Strengths Inventory, 14 data sets were not included because the child was reported to have a developmental disability, which can potentially include social deficits if on the Autism spectrum. The mean age of the sample was 35.48 years (SD = 7.44), ranging from 18 to 65 years old. The sample consisted of 79.5% Caucasian, 5% African American, 5.6% Hispanic/Latino, 5.6% Asian, 1.7% Multiracial, and 1.7% of another race. Regarding level of education, 0.3% had

less than a high school diploma, 23.8% had a high school diploma/GED, 39.7% had a Bachelor's degree, 20.2% had a Master's degree, 7.3% had an M.D./Ph.D./J.D., and 8.6% had a degree not listed. Their children (143 males and 159 females) were between the ages of three and five. Of these children, 13.2% were three years old, 41.3% were four years old, and 45.4% were five years old. The children's race were: 72.8% Caucasian, 5.3% African American, 4.6% Hispanic/Latino, 5.6% Asian, 9.6% Multiracial, and 1.3% of another race.

Materials and Instruments

Focus group semi-structured interview. A semi-structured interview protocol (Appendix A) was developed by the author and reviewed by a developmental psychologist, a school psychologist, a counseling psychology doctoral student, and a clinical child psychology doctoral student. The questions were designed to facilitate discussion about what strengths parents identify in preschool-aged children across different settings.

Preschool Strengths Inventory (PSI). The PSI was designed to assess preschool-aged children's (ages 3-5) strengths by parent report. The PSI uses parent report for a number of reasons. First, it is advantageous because they interact with their child across several contexts and the child can be observed over an extended period of time (Merrell, 2003). Second, children likely feel most comfortable with their parents and act "naturally." Third, an adult's report provides a more comprehensive and accurate representation of their child than a child's report, particularly at such a young age (Merrell, 2003).

There are some limitations with parent report. Foremost is the impact parents' emotional connection to their child may have on their perception and report of their child. In an attempt to diminish this effect as much as possible, the response format for the PSI was adopted from the Perceived Self-Competence Scale (Harter, 1982, see Appendix B). The Perceived Self-

Competence Scale was developed with a unique format to limit social desirability related to self-competence across a number of domains (cognitive, social, physical, and global). With this particular format, children select what description (from the two provided) most reflects how they perceive themselves and then to what degree ("somewhat" or "very much"). This format was chosen for the PSI to help reduce social desirability that would likely be present due to the implicit positive nature of strengths. With the PSI, parents select what description is most like their child and to what degree. Furthermore, the questions were written to describe children in general (e.g., Some children are typically pessimistic, but some children are typically optimistic.); therefore, a sense of distance between the question and the child is established. The Perceived Self Competence Scale demonstrated acceptable mean scores and variance, suggesting this format achieved its goal. Items on the PSI are scaled from 1-4, with the endorsement of "very much" of the strength receiving the higher rating of "4." The initial PSI consisted of 234 items, 117 of which were randomly selected by using www.Random.org for reverse scoring. Of those reverse-scored items, 19 remained in the final version of the PSI. The initial and final version of the PSI can be seen in Appendix C and D, respectively.

Demographic questionnaire. A demographic questionnaire designed by the author was used to gather basic information about the participants and their children (see Appendix E). Information requested included the parents' and children's ages, gender, and race/ethnicity. Parental education and whether or not the child has a developmental disability were asked as well.

Procedure

Focus group participant recruitment. Preschool/daycare directors in the Lawrence, Kansas area were contacted via phone and asked whether parents could be recruited from their

sites to participate in a focus group. The author and research assistants spoke to parents on site to recruit participants.

Focus groups data collection. To help begin the conceptualization of the classification of preschool children's strengths and the individual strengths they possess, parents of preschool children were asked a series of questions in the form of a semi-structured interview during a focus group. There were a total of four focus groups that consisted of three to five members each, and lasted between 45 and 75 minutes. The focus groups' dialogue was transcribed and coded by two counseling psychology doctoral students and one clinical child psychology doctoral student using a basic interpretative approach (Merriam & Associates, 2002). Themes were compared among the researchers and discussed until an agreement was reached. Four broad categories (intrapersonal, interpersonal, cognitive, and physical strengths) were identified. These aligned with developmental literature (Feldman, 2008; Flavell & Hill, 1969; Hartup & Yonas, 1971; Inhelder, 1956; Lipsett & Eimas, 1972; Masters, 1981; Stevenson, 1967). Specific strengths (e.g., creative, persistent) were identified as well, and these also corresponded to those identified from the personality, prosocial behavior, and social competence literature (see Table 2). Additional strengths identified from literature were added to the list (see Strengths Identified from the Literature in Table 2).

Instrument development. Steps for test construction recommended by Walsh and Betz (2001) were used to develop the PSI. First, a definition of the construct strength was developed; a strength is "a universal, natural, and positive trait or skill expressed intrapersonally, interpersonally, physically, and cognitively in a way that allows optimal functioning." Second, a large pool of items related to the construct of interest was developed (see Appendix C). Third, the initial items were administered to a large sample. Fourth, the initial items were refined by

conducting item analysis and by expert review. Fifth, the revised items (see Appendix D) were administered to a second sample. Sixth, reliability and validity were established.

The list of strengths was identified first from the focus groups and then confirmed and augmented with additional strengths derived from the social competence, prosocial behavior, and personality literature. A total of 234 items, with nine face-valid items for each intra- and inter-personal strength identified, were written by the author to ensure enough items were available for each strength. The strengths listed under "Strengths Identified from the Literature" in Table 2 were used as the final list, as it included all strengths identified from the focus groups as well as additional strengths found in the literature. Each strength listed met the criteria used to define the construct "strengths."

After the items were written, several steps were taken to ensure the content and clarity of each item. One developmental psychologist, one counseling psychologist, two teachers who are experts in childhood development, one graduate student in counseling psychology, and one professional counselor reviewed the instrument for content validity and clarity. Three of the expert reviewers were also parents, and assisted in identifying any problem questions related to a parents' perspective and whether the items seemed appropriate for preschool-aged children. Finally, the PSI and demographic questionnaire were administered online to two reviewers in the format parents would see. Based on feedback obtained, modifications to the instructions and the number of items presented at a time were made, and the use of a progress bar was implemented.

Instrument participant recruitment. Preschool/daycare directors in the Lawrence, Kansas, Kansas City, Kansas, and Kansas City, Missouri areas were contacted via phone and were asked whether researchers could talk to parents on site or have fliers distributed to parents to recruit participants. Participants were also asked to let other parents know about the research

project and ask them to participate. In addition, Qualtrics, a research software company that furnished the technology for the electronic distribution of the instrument, was used to recruit the remaining number of participants needed to reach approximately 150 fathers and 150 mothers of preschool children. Interested parents responded to a notification on Qualtric's home page or to a pop-up on a partner site. A random sample was selected from those who qualified. Participants recruited from Qualtrics were compensated by Qualtrics in cash points ($1-4) that could be exchanged for goods and services. No other incentives were offered. Participation was voluntary for all, and each participant received and agreed to an informed consent (Appendix F) online prior to completing the instrument.

Instrument data collection. After providing their informed consent, participants completed the demographic questionnaire and the 234-item PSI, in that order, online through Qualtrics. Participants received an identification number for confidentiality purposes. The data were transferred into an Excel spreadsheet that was later imported and analyzed in MPLUS 6.11 (Muthén & Muthén, 2010).

Instrument Data Analysis

The sample was randomly split in half, with equal male and female participants, to conduct the exploratory and confirmatory factor analyses. Independent samples *t*-tests and Chi-Square tests were conducted to ensure the samples were not significantly different from one another across demographic variables. Participant responses from the first half of the sample were analyzed using exploratory factor analysis. Responses from the second half of the sample were analyzed using confirmatory factor analysis. Finally, Cronbach's Alpha was calculated for the factors identified to measure internal consistency.

Chapter IV

Results

Following data collection, statistical analyses were conducted to identify the factors that comprise the PSI and test the validity and reliability of those findings. This chapter presents the statistical findings, including an analysis of the differences between groups, an exploratory factor analysis, a confirmatory factor analysis, and internal consistency.

Systematic Differences Between Groups

The sample was split in half by gender and every odd-numbered male and female were included in the exploratory factor analysis (Sample A) and every even-numbered male and female were included in the confirmatory factor analysis (Sample B). Independent samples *t*-tests and Chi-Square tests were conducted to ensure that Sample A and Sample B did not differ significantly from one another across demographic variables. The *t*-tests examined the parents' and children's ages; the Chi-Square tests examined the parents' and children's gender, and race/ethnicity, as well as parental education level. There were no significant differences between the two samples, suggesting the random split between the data set was acceptable (see Table 3 and Table 4).

Exploratory Factor Analysis

The responses of the first half of the participants (n =151) who took the 234-item PSI were analyzed using exploratory factor analysis. Rather than Principal Components Analysis, Exploratory Factor Analysis (EFA) was the analysis selected because it takes into account all the variance that is present to determine the underlying structure of the latent variables (Osborne, Costello, & Kellow, 2008). The data were treated as ordered categorical (ordinal) for two reasons. First, the response options for the items were presented dichotomously; second, the

Likert scale used had fewer than 10 response choices. The sample size was deemed appropriate because each item retained in the final EFA model had a factor loading of .50 or higher (Worthington & Whittaker, 2006). In addition, Guadagnoli and Velicer (1988) determined stable factor solutions can be achieved with sample sizes of 150 or smaller when each factor contains at least four loadings at .60. Since theory supported that the suspected latent factors were correlated, an oblique rotation (Geomin) was used (Osborne et al., 2008).

Several EFAs were run to reach the final EFA model. As a general decision rule, items with loadings on multiple factors at or near .32 were eliminated (Tabachnick & Fidell, 2007). As the model became more clear, a final decision rule was used, which included the retention of item loadings greater than or equal to .50 on at least one factor and less than or equal to .25 on any other factor. This method removed items that were either weakly loaded or cross-loaded on a number of factors. The stringent factor loading of .50 was used to strengthen the instrument and individual factors. Finally, items were reviewed for weak internal validity and content related to theory. No items were eliminated at this stage, leaving a five-factor model consisting of 37 items (see Table 5).

Examination of the results suggested a five-factor model was most appropriate. The five-factor model demonstrated adequate fit statistics (Table 6), did not have any cross loadings (Table 5), could clearly be identified by the "bend" in the scree plot (Figure 1), and was supported by theory.

Five indices were used to evaluate the fit of the EFA models, including the comparative index (CFI), the Tucker-Lewis Index (TLI), the standardized root mean square residual (SRMR), the root mean square error of approximation (RMSEA), and the Chi Square of Model Fit (Chi Square) and corresponding significance values (*p*). Hu and Bentler (1995) empirically examined

a number of fit index cutoffs and suggested that in order to minimize Type I and Type II errors a combination of an absolute fit index (e.g., RSMR) and relative fit indices (e.g., CFI, TLI) should be used. The Chi-Square Test of Model Fit attempts to fit a model to the observed data, while the Chi-Square Test of Model Fit for the Baseline Model represents what the model is expected to be and serves as a null model (Muthén & Muthén, 2010). Therefore, the lower the chi-square value, the better the fit (Tabachnick, & Fidell, 2007). The Chi-Square of Model Fit value for the model selected (728.691, $p < .001$) was smaller than the Chi-Square Test of Model Fit for the Baseline Model value (3735.44, $p < .001$), indicating good fit. As general guidelines, CFI and TLI values of .90 or above, SRMR values of .08 or less, and RMSEA values of .06 or less are considered supportive of good model fit (Hu & Bentler, 1995). The five-factor model selected met these general guidelines (CFI = .92; TLI = .90; RMSEA = .06; SRMR = .05). The percent of variance accounted for by each factor can be viewed in Table 7.

Finally, each factor was examined for interpretability. The items that remained following the implementation of the final decision rules for item retention (item loadings of less than or equal to .50 on at least one factor and less than or equal to .25 on any other factor) aligned conceptually based upon developmental personality literature (see Table 5). Specifically, the five factors identified paralleled the Big Five higher-order and corresponding lower-order factors (Caspi & Shiner, 2006). The five factors identified from the PSI included: Strengths of Agreeableness, Strengths of Extraversion/Openness, Strengths of Conscientiousness, Leadership, and Organization.

The Strengths of Agreeableness represent positive characteristics associated with the higher-order personality trait Agreeableness. Specifically, items retained within this factor parallel the lower-order factors that fall under Agreeableness, which include acceptance,

empathy, generosity, and helpfulness. The Strengths of Extraversion/Openness cross between the positive, higher-order traits of Extraversion and Openness to Experience. The lower-order factors represented include enthusiasm, positivity, creativity, flexibility, curiosity, and gregariousness. Similarly, the Strengths of Conscientiousness aligned with the positive, higher-order personality traits of Conscientiousness. Items retained represented the lower-order traits of goal-orientation, deliberateness, and trustworthiness.

In addition to the three broad factors, two more specific factors were identified—leadership and organization. Leadership and organization are two lower-order personality traits, which correspond to the higher-order traits of Extraversion and Conscientiousness, respectively. Items retained clearly characterize leadership and organization independent from other lower-order traits typically subsumed by the higher-order traits of Extraversion and Conscientiousness. The rationale for these findings will be elaborated upon in the discussion.

Confirmatory Factor Analysis

To test the fit of the five-factor model identified from the EFA, responses from Sample B (n =151) who took the 234-item PSI were analyzed using confirmatory factor analysis. Due to the categorical nature of the items, a robust weighted least squares estimator (WLSMV) was used (Muthén & Muthén, 2010).

Four indices were used to evaluate the fit of the model, including the comparative index (CFI), the Tucker-Lewis Index (TLI), the root mean square error of approximation (RMSEA), and the Chi Square of Model Fit (Chi Square) and corresponding significance values (*p*). The results of the fit statistics for the confirmatory factor analyses are presented in Table 8, and item loadings and descriptives can be found in Table 9. Again, the five-factor model selected met or nearly met the fit indices' general guidelines (CFI = .90; TLI = .89; RMSEA = .06), including

the Chi-Square Test of Model Fit value (905.64, $p < .001$), which was less than the Chi-Square Test of Model Fit for the Baseline Model (3404.09, $p < .001$). Browne and Cudeck (1993) emphasize model selection is subjective in nature and fit indices should not be used as a "mechanical decision process," but rather as a tool to help guide the decision process (p. 157). Therefore, the .89 TLI value is not concerning and suggests adequate fit in combination with the results of the other fit statistics.

Internal Consistency

To assess internal consistency, Cronbach's Alpha was calculated for all five factors for each sample. Alphas were adequate, as they were well above the accepted value of .70 (Nunnally, 1978), for both samples across all five factors (.82 to .89; see Tables 10).

Summary

Results showed the two samples' demographics were not significantly different from one another. The EFA resulted in five factors with factor loadings of .50 or higher, without any cross-loadings, and demonstrated adequate fit statistics. The five factors identified were Strengths of Agreeableness, Strengths of Extraversion/Openness, Strengths of Conscientiousness, Leadership, and Organization. These factors align with the Big Five personality literature, and were determined to have sound interpretability. This five-factor model was confirmed by the CFA, with adequate fit statistics. Finally, the five factors identified demonstrated adequate internal consistency.

Chapter V

Discussion

Psychological assessment is an essential component of psychological services; however, it is largely skewed toward disorders, difficulties, and malfunction (Lopez & Snyder, 2003; Seligman & Csikszentmihalyi, 2000). The literature indicates there are many benefits to identifying and focusing on strengths across contexts (Harter et al., 2002; Hodges & Harter, 2005; Seligman, Steen, Park, & Peterson, 2005). Further, there has been a greater emphasis on the identification of positive characteristics and the balance of strengths and weaknesses in treatment (e.g., Linley & Harrington, 2006; Seligman et al., 2005). There have been significant gains in the adult and adolescent literature, with the inclusion of multiple strength assessments and clinical interventions (Magyar-Moe, 2009). However, less attention has been given to children, particularly young children. It is especially pertinent for strengths to be identified and fostered in young children, as they are at a prime age to instill positive messages about the self that could potentially set them up for success and allow them to thrive. As such, the purpose of this study was to create and begin validating a reliable measure of young children's inter- and intra-personal strengths based upon a developmental framework. The steps taken towards the development of the PSI and the results will be summarized. Limitations of this study and future directions will be discussed.

Instrument Development

To begin the process of developing the PSI, focus groups with parents of preschool children were conducted to identify broad categories to classify strengths as well as the individual strengths preschool-aged children possess. From the focus groups, four categories were derived—intrapersonal, interpersonal, cognitive, and physical strengths. These categories

parallel the broad areas studied within the developmental literature (e.g., Flavell & Hill, 1969; Hartup & Yonas, 1971; Feldman, 2008). To narrow the scope of this project, physical and cognitive strengths were not included. To ensure a thorough list of strengths were generated, an extensive literature review covering personality, prosocial behavior, and social competence was conducted to identify any additional individual strengths that fall under the inter- and intra-personal categories. A final list of the strengths identified from the focus groups and literature review can be viewed on Table 2. Once the individual strengths were identified, nine questions were generated for each strength, which were reviewed by experts. The PSI was then administered to 302 parents of preschool-aged children.

The sample was divided in half by parent gender to conduct the exploratory and confirmatory factor analyses. Systematic differences between groups were examined to ensure that the demographic variables measured did not significantly differ from one another. Results demonstrated parents and children in the two groups did not differ in gender, age, and race, or parental education. This suggests testing the results of the EFA from the first set of data on the second set of data was appropriate.

Results from the exploratory factor analysis indicated a five-factor model best described the data and did not support the first hypothesis that strengths fall into two larger categories—intrapersonal and interpersonal characteristics. Rather, upon examination of the items that fell under each factor, it was clear the factors aligned with the Big Five personality research. Specifically, three of the factors identified parallel the higher-order Big Five factors of Agreeableness, Extraversion, Openness, and Conscientiousness. These three factors included Strengths of Agreeableness, Strengths of Extraversion/Openness, and Strengths of

Conscientiousness. The items retained under each factor were quite strong; each had a factor loading of .50 or higher, without any cross-loadings greater than .25.

Consistent with previous research of the Big Five factors, items under the Strengths of Agreeableness, Strengths of Extraversion/Openness, and Strengths of Conscientiousness parallel the lower-order traits typically subsumed by the higher-order factors of Agreeableness, Extraversion, Openness, and Conscientiousness. Specific traits within the Strengths of Agreeableness included: acceptance, empathy, generosity, and helpfulness. Traits under the Strengths of Extraversion/Openness included: enthusiasm, positivity, creativity, flexibility, curiosity, and gregariousness. Strengths of Conscientiousness included the following traits: goal-oriented, deliberate, and trustworthy. These results are telling in that although parents verbally described their children's strengths in terms of distinct intra- and inter-personal abilities in the focus groups, and social competence/social skills literature is often discrepant from the personality/temperament literature, interpersonal strengths were accounted for under the higher-order personality traits of Agreeableness and Extraversion/Openness.

A closer look at the factors identified showed many interpersonal skills are encompassed by higher order personality traits. For example, gregariousness, which falls under Extraversion, is a lower-order personality trait that clearly involves strong interpersonal skills. Empathy, generosity, and helpfulness are other examples as well, which are traits of Agreeableness. These results suggest that although positive social skills are clearly strengths preschool-aged children possess, they are perhaps best represented and categorized as traits under broader personality traits.

Developmental research supports personality traits identified in adults parallel those exhibited in children (Caspi & Shiner, 2006). While there is a great deal of evidence supporting

five factors of personality, the dimensions of those factors are not consistent across studies (Digman, 1990). The least understood and most debated of the Big Five factors is Openness to Experience, which commonly covaries with Extraversion (Caspi & Shiner, 2006). Therefore, it is not surprising items on the PSI representing lower-order traits of Extraversion and Openness are captured under one factor. It is quite possible these higher order traits are not yet differentiated during the preschool-aged years.

In addition to the three higher order factors discussed, two lower order factors were clearly distinguished—Leadership and Organization. These traits are typically subsumed by higher-order personality factors in adults, Extraversion and Conscientiousness, respectively (Caspi & Shiner, 2006). This suggests young children may be extraverted but *not* necessarily a leader, or a leader but *not* necessarily extraverted. Likewise, young children can be Conscientious, but *not* necessarily organized and vice versa.

These results suggest leadership and organization are somehow unique or more distinct in young children. Perhaps the demonstration of these abilities in young children is less common than adults, drawing more attention to these skills and pulling them away from the higher-order factors of Conscientiousness and Extraversion. Alternatively, it is also possible leadership and organization require an advanced set of skills for preschool-aged children, differentiating these abilities in the factor analysis. While the reasons for this distinction are not entirely clear, the factor structure is undeniable given the weak statistics and lack of interpretability of the three-factor model compared to the five-factor model that included Leadership and Organization as two distinct factors. Furthermore, despite the separation from the expected higher-order factors, Leadership and Organization are still specific lower-order personality traits supported by developmental literature.

Unlike adult literature, Neuroticism was not represented as a factor in the five-factor model found in this study. Emotional regulation and a calm nature would fall on the positive end of the Neuroticism continuum. Although preschool-aged children are capable of demonstrating these abilities and questions to address these strengths were included in the 234-item version of the PSI, they did not remain following the factor analysis. Given the young age of preschool-aged children, perhaps emotional regulation and a consistent calm nature are not yet defined strengths; therefore, parents did not frequently report these traits.

Lastly, the second hypothesis was supported in that the five-factor model identified using exploratory factor analysis was confirmed by a confirmatory factor analysis conducted with an independent sample, demonstrating validity of the PSI. Each factor identified demonstrated strong internal reliability as well. This suggests the PSI measures what it intends to and does so consistently.

Implications

The development of the PSI has several important implications. The most prominent is that the PSI is a psychometrically sound instrument that provides the means to identify strengths in young children. The instrument organizes strengths within a well-supported developmental framework, so the PSI can be used for both research and applied purposes. With regards to research, it provides a systematic and consistent way to identify the strengths young children possess, which could potentially be measured at three time points (ages 3, 4, and 5). This would provide the groundwork for studying strengths over time and their development as children mature.

There are several ways in which the PSI can be used for applied purposes. The first step in developing strengths is to accurately identify them (Clifton et al., 2006). Consequently, once

young children's strengths are identified, they can be fostered across a variety of settings. After parents complete the PSI, the results can be shared with their child's teacher(s), therapist(s), and other providers, and this information can be used to aid in the process of working and interacting with the child. For example, identifying strengths can assist clinical psychologists in the diagnosis and treatment of young children. Teachers and educators can incorporate the use of strengths into their lessons to maximize the educational experiences of young children. Across settings, giving extra attention to the child's use of strengths through describing and praising would likely be advantageous. By drawing attention to what the child is doing well, it is likely the child will engage in those behaviors and use their strengths more frequently given basic behavioral principles (Becker, Madsen, & Arnold, 1967).

It is clear adolescents and adults benefit from using their strengths (Harter, Schmidt, & Hayes, 2002; Hodges & Harter, 2005; Seligman, Steen, Park, & Peterson, 2005). With young children, the benefits are largely unknown. However, it is probable that by identifying and fostering strengths, children will build upon their successes and cope with difficulties similar to adolescents and adults. Early intervention across a number of domains is effective beginning during the preschool years (Nelson, Westhues, & MacLeod, 2003). As such, it is likely specific activities designed to help children develop their strengths would be beneficial. For example, time could be spent guiding a young child to use their creativity to work on learning numbers and letters by singing songs or drawing pictures. This would likely assist in the child's education. In addition, an adult could model flexibility when working in a group. This could facilitate the development a child's strength of flexibility when interacting with peers. Further, as the child begins to master the use of their strengths adults can facilitate how they might use them to address more challenging situations.

Limitations and Future Directions

While this study has many strengths, there are also some limitations. These limitations can translate into a number of future directions. First, although the two samples were randomly assigned to the EFA and CFA groups, each participant took the PSI with all 234 items that were initially developed. Ideally, a sample would have completed the revised 37-item PSI to confirm the five-factor model generated from the EFA, without the potential influence of the additional items that were not included in the final version of the PSI. One way to address this concern and strengthen the validity of this instrument would be to administer the 37-item version of the PSI to a new sample and analyze the results with a second confirmatory factor analysis to determine whether or not the five-factor model holds. Doing so would provide an additional sample, without any possible confounding factors related to the additional items in the first draft of the PSI. If the five-factor model is confirmed a second time through the use of a confirmatory factor analysis, it would strengthen its validity.

Second, a critical piece of instrument development is sound validation. Although a confirmatory factor analysis was conducted to test the validity of the model identified from the exploratory factor analysis, further validation is necessary to ensure the PSI is indeed a valid instrument that accurately measures young children's strengths. Specifically, tests of convergent and divergent validity would have strengthened this study to a greater extent. To address this limitation in future studies, measures of social skills, prosocial behavior, and Big Five personality traits could be used to test convergent validity. Measures of behavior, targeting behavioral difficulties, as well as measures of social deficits would be useful in testing divergent validity.

Third, the lack of test-retest reliability is a limitation of this study. Although internal reliability was calculated, examining the test-retest reliability at least across a short time interval will be a critical component in the continued development of the PSI. It is probable the factors identified in the PSI will parallel the development of personality factors given their inherent similarities. However, the preschool years are a time of rapid development and personality traits may not be completely solidified (Shiner & Caspi, 2003). It is possible the strengths reported could change over an extended amount of time, and like personality characteristics become more stable in childhood. Conversely, research in the development of strengths has suggested the most predominant strength an individual possess is stable beginning in early childhood through adulthood (Owens et al., 2009); therefore, it is possible some of the strengths reported will remain constant over the preschool years and beyond. Therefore, changes in the strengths identified and their growth trends over the preschool and childhood years will be important to examine. Longitudinal studies could help clarify the developmental trends of strengths. These topics need further exploration to determine the appropriateness of test-retest reliability at different time intervals and whether or not the PSI can be used to measure change over time.

Fourth, while male and female participants for both the parents and children were nearly equal, ethnicity was predominantly Caucasian. Having nearly even representation of mothers and fathers is a significant strength, as it allows either parent to take the PSI without a gender bias skewing the initial development. However, a greater diversity in the sample would make this instrument more representative. Further validation of this instrument and norming can help diversify the sample to a greater degree to address this issue.

There are several other future directions stemming from this project. The PSI was developed to identify strengths of preschool-aged children in the average population. As such, it

cannot be assumed the PSI can be used with populations with unique considerations. Testing its applicability with special populations, such as children with developmental delays and psychiatric disorders, is one way to extend its use. In addition, the PSI was designed for parents/guardians to complete. Given the amount of time many young children spend in preschool/daycare, it would be worthwhile to determine whether the PSI in its current form can accurately translate to the school setting or if a new instrument needs to be designed more specific to the school setting. Having a teacher's report in addition to a parent's report would help assess whether strengths exhibited in the school setting parallel those observed at home, and the consistency between parent and teacher report could be compared.

The PSI provides a solid foundation in the study of young children's strengths and can serve as a brief measure in the identification of their strengths. A more extensive instrument that targets specific, individual strengths would be beneficial as well. Through several focus groups and an extensive literature review, the groundwork for this task has been laid. The specific strengths have been identified and nine items for each strength were created and reviewed by a group of experts. This information could be used in the development of a lengthier, more comprehensive preschool strengths instrument with the intent to identify individual strengths.

Finally, the PSI will serve as a useful tool that can guide the design of clinical and school interventions for children that involve the promotion and development of strengths. As discussed previously, the first step in developing strengths is to accurately identify them (Clifton et al., 2006). Prior to the PSI this was not possible for preschool-aged children. Fostering the use and development of strengths through interventions designed for young children would likely be effective and beneficial, similar to early interventions designed to promote social and emotional development (Nelson et al., 2003).

In order to foster strengths, developing creative strengths interventions will be essential next steps. In the adult literature, the strengths intervention found to be most effective is called "Using Your Strengths," in which individuals received feedback about their strengths and were asked to use a strength in a different way each day for one week (Seligman et al., 2005). This intervention could be translated to young children where they are guided through strength-building exercises appropriate to their developmental level in the home or school setting on a daily basis focusing on the categories of the PSI. For example, if a child's top factor is Strengths of Agreeableness, activities that encourage and provide the opportunity to share could be implemented. Specifically, the child could be provided with a number of art supplies and asked to distribute them to classmates for that day's art activity.

Additional intervention ideas include creating short books and video clips appropriate for a child audience with various ways they can use their strengths in every-day scenarios or during challenging times. The strength would be clearly labeled and a number of different instances where the strength was used could be shown. Drawing one's best possible self, or an imagined, positive future self-concept in which the individual is engaged in an activity that is highly rewarding and interesting (Seligman et al., 2005), is another creative method that could be used to promote strength development. This intervention was demonstrated to increase self-esteem in school-aged children (Owens et al., 2010). A similar intervention could involve asking young children to draw a best possible self where they are using one of their strengths. As seen, there are several exciting possibilities to use the PSI to guide positive psychological interventions for young children based on their strengths.

Beyond interventions aimed at facilitating strength development, the PSI can also serve as a useful tool as part of interventions designed to enhance other positive psychological

constructs. For example, changes in well-being, life satisfaction, hope, and positive emotions could be measured following the introduction of and use of strengths through various activities discussed above. Further, it will be important to examine the role strengths play in health promotion, given the promising research in resilience (i.e., "bouncing back" to prior functioning), and Post Traumatic Growth (PTG) and benefit finding (i.e., recognizing the positive in negative experiences and/or demonstrating improved levels of functioning following a traumatic event; Bonanno, 2004; Helgeson, Lopez, & Mennella, 2009).

With research in young children's strengths in its infancy, the PSI fills a large gap in the positive psychology literature. It is the first measure designed for preschool-aged children that identifies internal strengths they possess based on developmental literature. It also shows strong promise in that the factors identified demonstrated high factor loadings across all items, the five-factor model was supported with a confirmatory factor analysis, and each factor had strong internal reliability. In addition, a number of future directions have been identified to make the PSI a stronger instrument and ways the PSI can serve as a starting point for a number of positive interventions for children. The use of an empirically sound instrument will be critical in intervention development designed to enhance and promote strengths; without the PSI, this would not be possible for young children. In conclusion, the PSI moves us one step closer to addressing the long-standing convention in psychology of studying "weakness and damage" and will hopefully ignite a new tradition beginning in early childhood of "nurturing what is best within ourselves" (Seligman, 1999, p. 1).

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Appendix A

Semi-Structured Focus Group Protocol

Introduction: Thank you for being willing to participate in this focus group. I will be asking you a series of questions that everyone will have the opportunity to answer. We are interested in finding out what characteristics your children have that will help them to be successful throughout their life. These can include the way your children interact with others or alone, their emotional responses, and their thought processes. Please allow everyone the opportunity to speak, respect what others have to say, and allow me to interrupt the discussion if I have any further questions. Does anyone have any questions at this point?

1) Psychologists describe strengths as "a capacity for feeling, thinking, and behaving in a way that allows optimal functioning in the pursuit of valued outcomes." What is your definition of a strength?
2) Tell me about a time your child was at their best? What did that look like in your child?
3) What are your child's strengths? What is your child particularly good at?
4) At what age did you child/students begin showing these strengths?
5) What positive behaviors do you see in your child in different settings (home, school, with friends, with family, alone, etc.)?
6) What positive behaviors do you see in other children that you don't necessarily see in your child?
7) Is there anything else you would like to add?

Appendix B

Harter's Self-Competence Scale for Children

Introduction: I am going to ask you a bunch of questions about what you think about different things. For all of these questions, there are no right or wrong answers. I just want to know what you think. If you ever don't understand a question, just tell me and I can explain it to you. Ready to start?

We have some sentences below, and we are interested in which choice best describes what you like or how you feel. Sometimes you may find it hard to decide between the two choices. Please tell me the one that is most like you. We are interested only in *your* likes or feelings, not in how other people feel about these things or how people think you *should* feel. There are no right or wrong answers, so please be honest in your answers.

Let me explain how these questions work. Here is a sample question. I'll read it out loud and you follow along with me.

Really True for Me	Sort of True for Me				Sort of True for Me	Really True for Me
		Some kids would rather play outdoors in their spare time	Or	Other kids would rather watch T.V.		

First, I want you to decide whether the first sentence better because you would rather play outside, or whether the second sentence describes you better because you would rather watch TV. Don't mark anything down yet, but first decide which sentence describes you better, and go to that side.

Now that you have decided which sentence describes you better, I want you to decide whether that is only "sort of true" or "really true" for you.

OK, that one was just for practice. Now we have some more sentences which I'm going to read out loud. For each one, tell me which sentence is most true for you and whether that is really true for you or only sort of true for you.

	Really True for me	Sort of True for me				Sort of True for me	Really True for me
1.	☐	☐	Some kids feel that they are very *good* at their school work	**BUT**	Other kids *worry* about whether they can do the school work assigned to them.	☐	☐
2.	☐	☐	Some kids find it *hard* to make friends	**BUT**	Other kids find it's pretty *easy* to make friends.	☐	☐
3.	☐	☐	Some kids do very *well* at all kinds of sports	**BUT**	Other kids *don't* feel that they are very good when it comes to sports.	☐	☐
4.	☐	☐	Some kids are *happy* with the way they look	**BUT**	Other kids are *not* happy with the way they look.	☐	☐
5.	☐	☐	Some kids often do not like the way they *behave*	**BUT**	Other kids usually *like* the way they behave.	☐	☐
6.	☐	☐	Some kids are often *unhappy* with themselves	**BUT**	Other kids are pretty *pleased* with themselves.	☐	☐
7.	☐	☐	Some kids feel like they are *just* as *smart* as other kids their age	**BUT**	Other kids aren't so sure and *wonder* if they are as smart.	☐	☐
8.	☐	☐	Some kids have *a lot* of friends	**BUT**	Other kids *don't* have very many friends.	☐	☐
9.	☐	☐	Some kids wish they could be a lot better at sports	**BUT**	Other kids feel they are good enough at sports.	☐	☐

10.	☐	☐	Some kids are *happy* with their height and weight	**BUT**	Other kids wish their height or weight were *different.*	☐	☐
11.	☐	☐	Some kids usually do the *right* thing	**BUT**	Other kids often *don't* do the right thing.	☐	☐
12.	☐	☐	Some kids *don't* like the way they are leading their life	**BUT**	Other kids *do* like the way they are leading their life.	☐	☐
13.	☐	☐	Some kids are pretty *slow* in finishing their school work	**BUT**	Other kids can do their school work *quickly.*	☐	☐
14.	☐	☐	Some kids would like to have a lot more friends	**BUT**	Other kids have as many friends as they want.	☐	☐
15.	☐	☐	Some kids think they could do well at just about any new sports activity they haven't tried before	**BUT**	Other kids are afraid they might *not* do well at sports they haven't ever tried.	☐	☐
16.	☐	☐	Some kids wish their body was *different*	**BUT**	Other kids *like* their body the way it is.	☐	☐
17.	☐	☐	Some kids usually *act* the way they know they are *supposed* to	**BUT**	Other kids often *don't* act the way they are supposed to.	☐	☐
18.	☐	☐	Some kids are *happy* with themselves as a person	**BUT**	Other kids are often *not* happy with themselves.	☐	☐

19.	☐	☐	Some kids often *forget* what they learn	**BUT**	Other kids can remember things *easily.*	☐	☐
20.	☐	☐	Some kids are always doing things with *a lot* of kids	**BUT**	Other kids usually do things by *themselves.*	☐	☐
21.	☐	☐	Some kids feel that they are *better* than others their age at sports	**BUT**	Other kids *don't* feel they can play as well.	☐	☐
22.	☐	☐	Some kids wish their physical appearance (how they look) was *different*	**BUT**	Other kids *like* their physical appearance the way it is.	☐	☐
23.	☐	☐	Some kids usually get in *trouble* because of things they do	**BUT**	Other kids usually *don't* do things that get them in trouble.	☐	☐
24.	☐	☐	Some kids *like* the kind of *person* they are	**BUT**	Other kids often wish they were someone else.	☐	☐
25.	☐	☐	Some kids do *very well* at their class work	**BUT**	Other kids *don't* do very well at their class work.	☐	☐
26.	☐	☐	Some kids wish that more people their age liked them	**BUT**	Other kids feel that most people their age *do* like them.	☐	☐
27.	☐	☐	In games and sports some kids usually *watch* instead of play	**BUT**	Other kids usually *play* rather than just watch.	☐	☐

28.	☐	☐	Some kids wish something about their face or hair looked *different*	**BUT**	Other kids *like* their face and hair the way they are.	☐	☐
29.	☐	☐	Some kids do things they know they *shouldn't* do	**BUT**	Other kids hardly *ever* do things they know they shouldn't do.	☐	☐
30.	☐	☐	Some kids are very *happy* being the way they are	**BUT**	Other kids wish they were *different.*	☐	☐
31.	☐	☐	Some kids have *trouble* figuring out the answers in school	**BUT**	Other kids almost *always* can figure out the answers.	☐	☐
32.	☐	☐	Some kids are *popular* with others their age	**BUT**	Other kids are *not* very popular.	☐	☐
33.	☐	☐	Some kids *don't* do well at new outdoor games	**BUT**	Other kids are *good* at new outdoor games right away.	☐	☐
34.	☐	☐	Some kids think that they are good looking	**BUT**	Other kids think that they are not very good looking.	☐	☐
35.	☐	☐	Some kids behave themselves very well	**BUT**	Other kids often find it hard to behave themselves.	☐	☐
36.	☐	☐	Some kids *are* not very happy with the way they do a lot of things.	**BUT**	Other kids think they way they do things is *fine.*	☐	☐

Appendix C

Preschool Strengths Inventory

Below are some statements that can describe children. We are interested in which choice best describes *your* child. If you have more than one child between the ages of 3 and 5, please complete the question thinking of *one* child. You can complete another survey and answer questions about your other child/children.

Sometimes you may find it hard to decide between the two choices; however, please answer each item. Once you decide which description is most like your child, please mark if you believe it is "really true" for your child or "sort of true." You will only mark one box for each item. There are no right or wrong answers and every child is unique, so please be honest in your answers.

There are multiple questions asking about the same characteristic. This is to help develop the final questionnaire.

Here is a sample question.

	Really True for my Child	Sort of True for my Child				Sort of True for my Child	Really True for my Child
0.	☐	☐	Some children prefer to play inside.	**BUT**	Some children prefer to play outside.	☐	☐

In this case, first decide whether you believe your child would prefer to play inside or if they would prefer to play outside. Once you decide between the two options, then decide if it is "really true" for your child or "sort of true" for your child.

For each of the items below, decide which description best describes your child and mark whether it is "really true" or "sort of true" for your child.

	Really True for my Child	Sort of True for my Child				Sort of True for my Child	Really True for my Child

1.	☐	☐	Some children are mellow.	**BUT**	Some children are full of energy.	☐	☐
2.	☐	☐	Some children ***occasionally*** become animated about things they are interested in.	**BUT**	Some children ***frequently*** become animated about things they are interested in.	☐	☐
3.	☐	☐	Some children are typically pessimistic.	**BUT**	Some children are typically optimistic.	☐	☐
4.	☐	☐	Some children are ***not*** that creative.	**BUT**	Some children are creative.	☐	☐
5.	☐	☐	Some children tend to treat others different from themselves unequally.	**BUT**	Some children tend to treat others different from themselves equally.	☐	☐
6.	☐	☐	Some children have difficulty adjusting to new situations.	**BUT**	Some children are able to adjust to new situations quickly.	☐	☐
7.	☐	☐	Some children do not express much interest in learning new things.	**BUT**	Some children are eager to learn new things.	☐	☐
8.	☐	☐	Some children are ***occasionally*** modest.	**BUT**	Some children are ***frequently*** modest.	☐	☐
9.	☐	☐	Some children are ***frequently*** calm.	**BUT**	Some children are ***occasionally*** calm.	☐	☐
10.	☐	☐	Some children remain focused when working on a task.	**BUT**	Some children become easily distracted when working on a task.	☐	☐
11.	☐	☐	Some children work hard to reach their goals.	**BUT**	Some children typically give up on goals they set.	☐	☐
12.	☐	☐	Some children ***typically*** give up when faced with a difficult challenge.	**BUT**	Some children ***don't*** give up when faced with a difficult challenge.	☐	☐

13.	☐	☐	Some children generally keep their room neat.	**BUT**	Some children tend to have messy rooms.	☐	☐
14.	☐	☐	Some children do ***not*** often need reminders to behave.	**BUT**	Some children often need reminders to behave.	☐	☐
15.	☐	☐	Some children are ***occasionally*** intentional with their actions.	**BUT**	Some children are ***frequently*** intentional with their actions.	☐	☐
16.	☐	☐	Some children are ***occasionally*** accepting of peers different from themselves.	**BUT**	Some children are ***frequently*** accepting of peers different from themselves.	☐	☐
17.	☐	☐	Some children are generally selfish.	**BUT**	Some children are generally selfless.	☐	☐
18.	☐	☐	Some children do ***not*** instantly recognize when others are upset.	**BUT**	Some children instantly recognize when others are upset.	☐	☐
19.	☐	☐	Some children are introverted.	**BUT**	Some children are very outgoing.	☐	☐
20.	☐	☐	Some children are willing to give their belongings to others.	**BUT**	Some children are not willing to give their belongings to others.	☐	☐
21.	☐	☐	Some children are typically warm in their interactions with others.	**BUT**	Some children are typically cool in their interactions with others.	☐	☐
22.	☐	☐	Some children are less humorous.	**BUT**	Some children have a strong sense of humor.	☐	☐
23.	☐	☐	Some children are ***occasionally*** cooperative.	**BUT**	Some children are ***typically*** cooperative.	☐	☐
24.	☐	☐	Some children are ***not*** happy when asked to help with chores around the house.	**BUT**	Some children are happy to help with chores around the house.	☐	☐

25.	☐	☐	Some children can keep a secret.	**BUT**	Some children have difficulty keeping a secret.	☐	☐
26.	☐	☐	Some children are typically leaders.	**BUT**	Some children are typically followers.	☐	☐
27.	☐	☐	Some children enjoy one or two activities.	**BUT**	Some children enjoy participating in a number of activities.	☐	☐
28.	☐	☐	Some children are ***occasionally*** enthusiastic.	**BUT**	Some children are ***frequently*** enthusiastic.	☐	☐
29.	☐	☐	Some children ***occasionally*** have a positive attitude.	**BUT**	Some children ***frequently*** have a positive attitude.	☐	☐
30.	☐	☐	Some children are typically unimaginative.	**BUT**	Some children have a good imagination.	☐	☐
31.	☐	☐	Some children are open to new ideas.	**BUT**	Some children have difficulty accepting new ideas.	☐	☐
32.	☐	☐	Some children have difficulty adapting to unfamiliar situations.	**BUT**	Some children are able to adapt to unfamiliar situations.	☐	☐
33.	☐	☐	Some children have a few interests.	**BUT**	Some children are interested in a variety of topics.	☐	☐
34.	☐	☐	Some children are overconfident.	**BUT**	Some children are humble.	☐	☐
35.	☐	☐	Some children generally have high anxiety.	**BUT**	Some children are generally relaxed.	☐	☐
36.	☐	☐	Some children move from activity to activity.	**BUT**	Some children can stay occupied with one activity for extended periods of time.	☐	☐
37.	☐	☐	Some children shy away from setting goals.	**BUT**	Some children thrive on setting goals.	☐	☐
38.	☐	☐	Some children feel driven to work on a task until it is complete.	**BUT**	Some children do not mind leaving a task incomplete.	☐	☐

39.	☐	☐	Some children are unorganized.	**BUT**	Some children are organized.	☐	☐
40.	☐	☐	Some children do ***not*** consistently get along with friends.	**BUT**	Some children consistently get along with friends.	☐	☐
41.	☐	☐	Some children think about their actions before they act.	**BUT**	Some children do not give much thought before they act.	☐	☐
42.	☐	☐	Some children are ***occasionally*** tolerant of opinions different from their own.	**BUT**	Some children are ***frequently*** tolerant of opinions different from their own.	☐	☐
43.	☐	☐	Some children help others without the promise of a reward.	**BUT**	Some children are unwilling to help others without a reward.	☐	☐
44.	☐	☐	Some children have difficulty showing compassion for those in pain.	**BUT**	Some children easily show compassion for those in pain.	☐	☐
45.	☐	☐	Some children are very sociable.	**BUT**	Some children are shy.	☐	☐
46.	☐	☐	Some children are ***occasionally*** generous.	**BUT**	Some children are ***frequently*** generous.	☐	☐
47.	☐	☐	Some children are kind in all interactions with people.	**BUT**	Some children are selective in who they are kind to.	☐	☐
48.	☐	☐	Some children ***often*** like to joke around.	**BUT**	Some children ***occasionally*** like to joke around.	☐	☐
49.	☐	☐	Some children are ***typically*** supportive of others they interact with.	**BUT**	Some children are ***occasionally*** supportive of others they interact with.	☐	☐
50.	☐	☐	Some children ***frequently*** seek out opportunities to help others.	**BUT**	Some children ***occasionally*** seek out opportunities to help others.	☐	☐
51.	☐	☐	Some children ***cannot*** easily be depended on.	**BUT**	Some children can easily be depended on.	☐	☐

52.	☐	☐	Some children often lead the group when playing.	**BUT**	Some children often go along with what the group is playing.	☐	☐
53.	☐	☐	Some children are energetic.	**BUT**	Some children are calm.	☐	☐
54.	☐	☐	Some children are easily excited.	**BUT**	Some children are ***not*** easily excited.	☐	☐
55.	☐	☐	Some children are ***occasionally*** upbeat.	**BUT**	Some children are ***frequently*** upbeat.	☐	☐
56.	☐	☐	Some children have difficulty with problem-solving in challenging situations.	**BUT**	Some children are good at problem-solving in challenging situations.	☐	☐
57.	☐	☐	Some children are tolerant of many ideas and people different from themselves.	**BUT**	Some children have difficulty accepting ideas and people different from themselves.	☐	☐
58.	☐	☐	Some children tend to be flexible.	**BUT**	Some children tend to be inflexible.	☐	☐
59.	☐	☐	Some children ***frequently*** ask questions.	**BUT**	Some children ***occasionally*** ask questions.	☐	☐
60.	☐	☐	Some children openly discuss their achievements.	**BUT**	Some children do not discuss their achievements openly.	☐	☐
61.	☐	☐	Some children remain composed when they get into a conflict.	**BUT**	Some children become agitated when they get into a conflict.	☐	☐
62.	☐	☐	Some children don't mind if they leave a project incomplete.	**BUT**	Some children work on a project until it is complete.	☐	☐
63.	☐	☐	Some children do ***not*** enjoy setting goals for themselves.	**BUT**	Some children enjoy setting goals for themselves.	☐	☐
64.	☐	☐	Some children are ***occasionally*** persistent.	**BUT**	Some children are ***frequently*** persistent.	☐	☐

65.	☐	☐	Some children like to arrange their toys.	**BUT**	Some children do ***not*** enjoy arranging their toys.	☐	☐
66.	☐	☐	Some children can correct their behavior if they are misbehaving.	**BUT**	Some children have difficulty correcting their behavior if they are misbehaving.	☐	☐
67.	☐	☐	Some children are ***occasionally*** thoughtful in their interactions with other people.	**BUT**	Some children are ***frequently*** thoughtful in their interactions with other people.	☐	☐
68.	☐	☐	Some children are willing to play with others who look different than they do.	**BUT**	Some children are ***not*** willing to play with others who look different than they do.	☐	☐
69.	☐	☐	Some children help others without complaint.	**BUT**	Some children complain when helping others.	☐	☐
70.	☐	☐	Some children can identify the emotions others are feeling.	**BUT**	Some children struggle to identify the emotions others are feeling.	☐	☐
71.	☐	☐	Some children are ***very*** animated when communicating with others.	**BUT**	Some children are ***less*** animated when communicating with others.	☐	☐
72.	☐	☐	Some children struggle giving gifts to others.	**BUT**	Some children enjoy giving gifts to others.	☐	☐
73.	☐	☐	Some children ***frequently*** share kind words with others.	**BUT**	Some children ***occasionally*** share kind words with others.	☐	☐
74.	☐	☐	Some children do ***not*** like playing pranks.	**BUT**	Some children like to play pranks.	☐	☐
75.	☐	☐	Some children would rather work in groups than alone.	**BUT**	Some children would rather work alone than in groups.	☐	☐
76.	☐	☐	Some children do ***not*** complain when asked to help with a task.	**BUT**	Some children ***typically*** complain when asked to help with a task.	☐	☐

77.	☐	☐	Some children are ***occasionally*** responsible.	**BUT**	Some children are ***consistently*** responsible.	☐	☐
78.	☐	☐	Some children ***occasionally*** make decisions for their group of friends.	**BUT**	Some children ***often*** make decisions for their group of friends.	☐	☐
79.	☐	☐	Some children are ***frequently*** active.	**BUT**	Some children are ***occasionally*** active.	☐	☐
80.	☐	☐	Some children are eager to participate in many activities.	**BUT**	Some children are reluctant to participate in many activities.	☐	☐
81.	☐	☐	Some children are ***occasionally*** cheerful.	**BUT**	Some children are ***frequently*** cheerful.	☐	☐
82.	☐	☐	Some children have difficulty coming up with original ideas.	**BUT**	Some children often come up with original ideas.	☐	☐
83.	☐	☐	Some children have difficulty accepting beliefs different from their own.	**BUT**	Some children are open to beliefs different from their own.	☐	☐
84.	☐	☐	Some children ***occasionally*** go with the flow.	**BUT**	Some children ***frequently*** go with the flow.	☐	☐
85.	☐	☐	Some children are ***frequently*** curious about their surroundings.	**BUT**	Some children are ***occasionally*** curious about their surroundings.	☐	☐
86.	☐	☐	Some children prefer to have all the attention on themselves.	**BUT**	Some children prefer ***not*** to have all the attention on themselves.	☐	☐
87.	☐	☐	Some children are often emotional in situations of high stress.	**BUT**	Some children are often even-tempered in situations of high stress.	☐	☐
88.	☐	☐	Some children are less interested in what they are involved with or working on.	**BUT**	Some children become absorbed in what they are involved with or working on.	☐	☐

89.	☐	☐	Some children are ***not*** goal-orientated.	**BUT**	Some children are goal-orientated.	☐	☐
90.	☐	☐	Some children give minimal effort in what they are participating in.	**BUT**	Some children consistently try their best in what they are participating in.	☐	☐
91.	☐	☐	Some children enjoy categorizing their toys or books.	**BUT**	Some children ***dislike*** categorizing their toys or books.	☐	☐
92.	☐	☐	Some children are ***unable*** to behave when other children around them are misbehaving.	**BUT**	Some children are able to behave even when other children around them are misbehaving.	☐	☐
93.	☐	☐	Some children are ***not*** typically cautious.	**BUT**	Some children tend to be cautious.	☐	☐
94.	☐	☐	Some children are ***not*** interested in talking with others who have different beliefs than theirs.	**BUT**	Some children are interested in talking with others who have different beliefs than they do.	☐	☐
95.	☐	☐	Some children are ***unwilling*** to give something valuable to others in need.	**BUT**	Some children are ***willing*** to give something valuable to others in need.	☐	☐
96.	☐	☐	Some children are ***occasionally*** responsive to the emotions others express.	**BUT**	Some children are ***frequently*** responsive to the emotions others express.	☐	☐
97.	☐	☐	Some children are ***unreserved*** in their interactions with others.	**BUT**	Some children are ***reserved*** in their interactions with others.	☐	☐
98.	☐	☐	Some children like to share with friends and/or siblings.	**BUT**	Some children do ***not*** like to share with friends and/or siblings.	☐	☐
99.	☐	☐	Some children genuinely care about ***all*** people they interact with.	**BUT**	Some children care about the people they are close to.	☐	☐

100.	☐	☐	Some children are really funny.	**BUT**	Some children are less funny.	☐	☐
101.	☐	☐	Some children are ***typically*** compliant.	**BUT**	Some children are ***occasionally*** compliant.	☐	☐
102.	☐	☐	Some children find ways to help around the house without being asked.	**BUT**	Some children need to be asked to help around the house.	☐	☐
103.	☐	☐	Some children are ***occasionally*** honest.	**BUT**	Some children are ***typically*** honest.	☐	☐
104.	☐	☐	Some children tend to decide what the group will play.	**BUT**	Some children tend to follow what the group is playing.	☐	☐
105.	☐	☐	Some children are always on the go.	**BUT**	Some children are happy staying in one place.	☐	☐
106.	☐	☐	Some children are ***occasionally*** passionate about their interests.	**BUT**	Some children are ***frequently*** passionate about their interests.	☐	☐
107.	☐	☐	Some children are hopeful about the future.	**BUT**	Some children believe the worst will happen in their future.	☐	☐
108.	☐	☐	Some children are ***not*** very artistic.	**BUT**	Some children are artistic.	☐	☐
109.	☐	☐	Some children are open-minded.	**BUT**	Some children are closed-minded.	☐	☐
110.	☐	☐	Some children have difficulty meeting new people.	**BUT**	Some children find it easy to meet new people.	☐	☐
111.	☐	☐	Some children are not interested in unfamiliar things.	**BUT**	Some children are fascinated by things they are unfamiliar with.	☐	☐
112.	☐	☐	Some children only talk about their accomplishments when asked.	**BUT**	Some children talk about their accomplishments whether or not they are asked.	☐	☐

113.	☐	☐	Some children can easily self-soothe when upset.	**BUT**	Some children have difficulty calming themselves when upset.	☐	☐
114.	☐	☐	Some children prefer engaging in multiple tasks at once.	**BUT**	Some children prefer to complete a task before they move onto the next one.	☐	☐
115.	☐	☐	Some children ***consistently*** have their eyes on their goals.	**BUT**	Some children ***occasionally*** have their eyes on their goals.	☐	☐
116.	☐	☐	Some children tend to give up before they get what they want.	**BUT**	Some children typically ***don't*** give up until they get what they want.	☐	☐
117.	☐	☐	Some children keep their belongings in order.	**BUT**	Some children do ***not*** keep their belongings in order.	☐	☐
118.	☐	☐	Some children have difficulty managing their behavior in stressful situations.	**BUT**	Some children can manage their behavior in stressful situations.	☐	☐
119.	☐	☐	Some children do ***not*** plan their course of action.	**BUT**	Some children carefully plan their course of action.	☐	☐
120.	☐	☐	Some children are ***frequently*** interested in learning about different cultures.	**BUT**	Some children are ***occasionally*** interested in learning about different cultures.	☐	☐
121.	☐	☐	Some children ask to give a donation to charity.	**BUT**	Some children do ***not*** ask to give a donation to charity.	☐	☐
122.	☐	☐	Some children can put themselves in the shoes of others.	**BUT**	Some children have difficulty putting themselves in others' shoes.	☐	☐
123.	☐	☐	Some children shy away from starting a conversation with new people.	**BUT**	Some children do not have difficulty starting a conversation with new people.	☐	☐

124.	☐	☐	Some children have difficulty sharing.	**BUT**	Some children share easily.	☐	☐
125.	☐	☐	Some children make it a point to compliment others often.	**BUT**	Some children ***occasionally*** compliment others.	☐	☐
126.	☐	☐	Some children are ***occasionally*** comical when interacting with others.	**BUT**	Some children are ***frequently*** comical when interacting with others.	☐	☐
127.	☐	☐	Some children can easily interact with others.	**BUT**	Some children have difficulty interacting with others.	☐	☐
128.	☐	☐	Some children ***frequently*** help their peers and/or siblings.	**BUT**	Some children ***occasionally*** help their peers and/or siblings.	☐	☐
129.	☐	☐	Some children are often confided in by others.	**BUT**	Some children are ***not*** often confided in by others.	☐	☐
130.	☐	☐	Some children naturally follow along with the group's activity.	**BUT**	Some children naturally guide the group's activity.	☐	☐
131.	☐	☐	Some children are lively.	**BUT**	Some children are relaxed.	☐	☐
132.	☐	☐	Some children are enthusiastic about many things in their life.	**BUT**	Some children are ***not*** enthusiastic about many things in their life.	☐	☐
133.	☐	☐	Some children tend to look on the negative side of things.	**BUT**	Some children tend to look on the bright side of things.	☐	☐
134.	☐	☐	Some children have difficulty coming up with multiple solutions to a problem.	**BUT**	Some children can come up with many ways to solve a problem.	☐	☐
135.	☐	☐	Some children enjoy learning about new ideas and cultures.	**BUT**	Some children are less interested in learning about new ideas and cultures.	☐	☐

136.	☐	☐	Some children struggle when plans change.	**BUT**	Some children are comfortable when plans change.	☐	☐
137.	☐	☐	Some children do not pursue new learning opportunities.	**BUT**	Some children seek out learning opportunities.	☐	☐
138.	☐	☐	Some children shy away from discussions about their strengths and abilities.	**BUT**	Some children light up during discussions about their strengths and abilities.	☐	☐
139.	☐	☐	Some children are laid-back in a new situation.	**BUT**	Some children are irritable in a new situation.	☐	☐
140.	☐	☐	Some children focus their attention on multiple things at a particular time.	**BUT**	Some children focus all their attention on a single thing at a particular time.	☐	☐
141.	☐	☐	Some children put a great deal of effort into things they would like to achieve.	**BUT**	Some children put minimal effort into things they would like to achieve.	☐	☐
142.	☐	☐	Some children don't give up until they finish what they're working on.	**BUT**	Some children can leave a project even if it is incomplete.	☐	☐
143.	☐	☐	Some children enjoy spending time organizing their possessions.	**BUT**	Some children do ***not*** care to spend time organizing their possessions.	☐	☐
144.	☐	☐	Some children are typically ***able*** to behave themselves in an exciting situation.	**BUT**	Some children are typically ***unable*** to behave themselves in an exciting situation.	☐	☐
145.	☐	☐	Some children are ***generally*** very considerate in their interactions with others.	**BUT**	Some children are ***occasionally*** considerate in their interactions with others.	☐	☐
146.	☐	☐	Some children are ***occasionally*** open to new ideas.	**BUT**	Some children are ***frequently*** open to new ideas.	☐	☐

147.	☐	☐	Some children do ***not*** enjoy giving their time to help others.	**BUT**	Some children enjoy giving their time to help others.	☐	☐
148.	☐	☐	Some children have a difficult time understanding the difficulties others face.	**BUT**	Some children understand the difficulties others face.	☐	☐
149.	☐	☐	Some children are ***highly*** expressive in their interactions with others.	**BUT**	Some children are ***less*** expressive in their interactions with others.	☐	☐
150.	☐	☐	Some children would prefer not to give their time to help someone.	**BUT**	Some children are willing to give their time to help someone.	☐	☐
151.	☐	☐	Some children ***often*** tell others how much they care about them.	**BUT**	Some children ***occasionally*** tell others how much they care about them.	☐	☐
152.	☐	☐	Some children are ***typically*** hilarious when entertaining others.	**BUT**	Some children are ***occasionally*** hilarious when entertaining others.	☐	☐
153.	☐	☐	Some children ***occasionally*** follow the rules.	**BUT**	Some children ***typically*** follow the rules.	☐	☐
154.	☐	☐	Some children immediately assist others in need of help.	**BUT**	Some children may shy away from helping others in need.	☐	☐
155.	☐	☐	Some children ***consistently*** follow through with what they are asked to do.	**BUT**	Some children ***occasionally*** follow through with what they are asked to do.	☐	☐
156.	☐	☐	Some children go along with what activity is initiated by others in the group.	**BUT**	Some children initiate an activity for the group to participate in.	☐	☐
157.	☐	☐	Some children become tired before other children when playing.	**BUT**	Some children outlast other children when playing.	☐	☐

158.	☐	☐	Some children show ***a lot*** of excitement when interacting with others.	**BUT**	Some children show ***less*** excitement when interacting with others.	☐	☐
159.	☐	☐	Some children are typically in ***good*** spirits.	**BUT**	Some children are typically in a ***bad*** mood.	☐	☐
160.	☐	☐	Some children enjoy arts and crafts.	**BUT**	Some children do ***not*** enjoy arts and crafts.	☐	☐
161.	☐	☐	Some children ***regularly*** pursue new learning experiences.	**BUT**	Some children ***occasionally*** pursue new learning experiences.	☐	☐
162.	☐	☐	Some children are flexible with the outcome when a number of choices are presented to them.	**BUT**	Some children have a distinct preference when presented with a number of options.	☐	☐
163.	☐	☐	Some children are ***occasionally*** curious.	**BUT**	Some children are ***frequently*** curious.	☐	☐
164.	☐	☐	Some children do ***not*** blush when others discuss their accomplishments.	**BUT**	Some children blush when others discuss their accomplishments.	☐	☐
165.	☐	☐	Some children have difficulty remaining calm when angry.	**BUT**	Some children are able to remain calm when angry.	☐	☐
166.	☐	☐	Some children are ***occasionally*** focused.	**BUT**	Some children are ***generally*** focused.	☐	☐
167.	☐	☐	Some children ***occasionally*** work hard until they achieve their goal.	**BUT**	Some children ***frequently*** work hard until they achieve their goal.	☐	☐
168.	☐	☐	Some children ***typically*** persevere through difficult situations without assistance.	**BUT**	Some children ***occasionally*** persevere through difficult situations without assistance.	☐	☐
169.	☐	☐	Some children don't particularly care if their belongings are neat.	**BUT**	Some children like their belongings to be neat.	☐	☐

170.	☐	☐	Some children ***occasionally*** misbehave to receive attention from adults.	**BUT**	Some children ***frequently*** misbehave to receive attention from adults.	☐	☐
171.	☐	☐	Some children ***frequently*** give a lot of thought to projects they work on.	**BUT**	Some children ***occasionally*** give a lot of thought to projects they work on.	☐	☐
172.	☐	☐	Some children are ***generally*** accepting of their peers, despite their differences.	**BUT**	Some children are ***occasionally*** accepting of their peers, despite their differences.	☐	☐
173.	☐	☐	Some children ***occasionally*** seek out opportunities to help those less fortunate than themselves.	**BUT**	Some children ***frequently*** seek out opportunities to help those less fortunate than themselves.	☐	☐
174.	☐	☐	Some children ***occasionally*** listen to others' concerns/problems.	**BUT**	Some children ***frequently*** listen to others' concerns/problems.	☐	☐
175.	☐	☐	Some children make friends easily.	**BUT**	Some children find making friends more challenging.	☐	☐
176.	☐	☐	Some children appreciate giving away toys they no longer play with.	**BUT**	Some children find it challenging to give away toys they no longer play with.	☐	☐
177.	☐	☐	Some children are ***occasionally*** sincere in their interactions with others.	**BUT**	Some children are ***generally*** sincere in their interactions with others.	☐	☐
178.	☐	☐	Some children are ***occasionally*** silly.	**BUT**	Some children are ***frequently*** silly.	☐	☐
179.	☐	☐	Some children find it more challenging to play and work in groups.	**BUT**	Some children play and work well in groups.	☐	☐
180.	☐	☐	Some children enjoy assisting their peers.	**BUT**	Some children find it less enjoyable to assist their peers.	☐	☐

181.	☐	☐	Some children are more difficult to trust with sensitive information.	**BUT**	Some children can be trusted with sensitive information.	☐	☐
182.	☐	☐	Some children ***frequently*** direct the group.	**BUT**	Some children ***occasionally*** direct the group.	☐	☐
183.	☐	☐	Some children have ***a lot*** of energy.	**BUT**	Some children have ***less*** energy.	☐	☐
184.	☐	☐	Some children ***frequently*** express joy and excitement in anticipation of the day's activities.	**BUT**	Some children ***seldom*** express joy and excitement in anticipation of the day's activities.	☐	☐
185.	☐	☐	Some children, despite a poor situation, ***frequently*** find a way to make it a positive experience.	**BUT**	Some children, despite a poor situation, ***occasionally*** find a way to make it a positive experience.	☐	☐
186.	☐	☐	Some children ***often*** think outside the box.	**BUT**	Some children ***occasionally*** think outside the box.	☐	☐
187.	☐	☐	Some children are ***frequently*** interested in exploring topics they are unfamiliar with.	**BUT**	Some children are ***occasionally*** interested in exploring topics they are unfamiliar with.	☐	☐
188.	☐	☐	Some children in an unfamiliar situation have trouble adapting.	**BUT**	Some children in an unfamiliar situation adapt well.	☐	☐
189.	☐	☐	Some children express curiosity about ***a number*** of topics.	**BUT**	Some children express curiosity about ***a few*** topics.	☐	☐
190.	☐	☐	Some children do ***not*** like to talk about awards they have won.	**BUT**	Some children enjoy talking about the awards they have won.	☐	☐
191.	☐	☐	Some children are typically able to keep their voice down in an exciting situation.	**BUT**	Some children have difficulty keeping their voice down in an exciting situation.	☐	☐

192.	☐	☐	Some children ***occasionally*** become engrossed in the activity they are participating in.	**BUT**	Some children ***frequently*** become engrossed in the activity they are participating in.	☐	☐
193.	☐	☐	Some children can list a number of goals they have set for themselves.	**BUT**	Some children can list two or fewer goals they have set for themselves.	☐	☐
194.	☐	☐	Some children are ***occasionally*** determined to accomplish the task at hand.	**BUT**	Some children are ***generally*** determined to accomplish the task at hand.	☐	☐
195.	☐	☐	Some children ***occasionally*** spend time arranging their room.	**BUT**	Some children ***frequently*** spend time arranging their room.	☐	☐
196.	☐	☐	Some children ***occasionally*** correct their behavior on their own if they begin to misbehave.	**BUT**	Some children ***frequently*** correct their behavior on their own if they begin to misbehave.	☐	☐
197.	☐	☐	Some children ***generally*** reflect upon the options presented to them.	**BUT**	Some children ***occasionally*** reflect upon the options presented to them.	☐	☐
198.	☐	☐	Some children are ***generally*** patient with others who have different ideas than they do.	**BUT**	Some children are ***occasionally*** patient with others who have different ideas than they do.	☐	☐
199.	☐	☐	Some children ***generally*** enjoy volunteering.	**BUT**	Some children ***occasionally*** enjoy volunteering.	☐	☐
200.	☐	☐	Some children are ***frequently*** empathic.	**BUT**	Some children are ***occasionally*** empathic.	☐	☐
201.	☐	☐	Some children can have a conversation with anyone.	**BUT**	Some children find it easier to talk with people they know.	☐	☐
202.	☐	☐	Some children ***frequently*** make gifts to give to family and friends.	**BUT**	Some children ***occasionally*** make gifts to give to family and friends.	☐	☐

203.	☐	☐	Some children are generally kind to everyone.	**BUT**	Some children are kind to those they are close to.	☐	☐
204.	☐	☐	Some children prefer ***not*** to play pranks on others.	**BUT**	Some children like to play pranks on others.	☐	☐
205.	☐	☐	Some children ***often*** do what they are asked.	**BUT**	Some children ***occasionally*** do what they are asked.	☐	☐
206.	☐	☐	Some children ***occasionally*** ask their friends or siblings how they can help them.	**BUT**	Some children ***frequently*** ask their friends or siblings how they can help them.	☐	☐
207.	☐	☐	Some children are ***often*** sought by their peers to share a secret.	**BUT**	Some children are ***occasionally*** sought by their peers to share a secret.	☐	☐
208.	☐	☐	Some children ***typically*** influence what the group will do.	**BUT**	Some children ***occasionally*** influence what the group will do.	☐	☐
209.	☐	☐	Some children play one sport or less.	**BUT**	Some children play a number of sports.	☐	☐
210.	☐	☐	Some children ***occasionally*** light up when talking with others.	**BUT**	Some children ***frequently*** light up when talking with others.	☐	☐
211.	☐	☐	Some children ***occasionally*** make the most of a bad situation.	**BUT**	Some children ***frequently*** make the most of a bad situation.	☐	☐
212.	☐	☐	Some children are ***occasionally*** inventive.	**BUT**	Some children are ***frequently*** inventive.	☐	☐
213.	☐	☐	Some children are ***frequently*** interested in getting to know people they are unfamiliar with.	**BUT**	Some children are ***occasionally*** interested in getting to know people they are unfamiliar with.	☐	☐
214.	☐	☐	Some children ***occasionally*** become upset when an outcome is not in their favor.	**BUT**	Some children ***frequently*** become upset when an outcome is not in their favor.	☐	☐

215.	☐	☐	Some children are ***especially*** interested in learning as much as they can about the world around them.	**BUT**	Some children are ***somewhat*** interested in learning as much as they can about the world around them.	☐	☐
216.	☐	☐	Some children ***frequently*** become embarrassed when others talk about their achievements.	**BUT**	Some children ***occasionally*** become embarrassed when others talk about their achievements.	☐	☐
217.	☐	☐	Some children are ***occasionally*** easy-going.	**BUT**	Some children are ***typically*** easy-going.	☐	☐
218.	☐	☐	Some children are ***occasionally*** dedicated to completing a task.	**BUT**	Some children are ***frequently*** dedicated to completing a task.	☐	☐
219.	☐	☐	Some children are ***somewhat*** motivated to reach their goals.	**BUT**	Some children are ***highly*** motivated to reach their goals.	☐	☐
220.	☐	☐	Some children are ***generally*** capable of enduring hard times without a great deal of help.	**BUT**	Some children are ***occasionally*** capable of enduring hard times without a great deal of help.	☐	☐
221.	☐	☐	Some children enjoy organizing things.	**BUT**	Some children ***don't*** particularly enjoy organizing things.	☐	☐
222.	☐	☐	Some children ***occasionally*** listen to what adults ask of them.	**BUT**	Some children ***typically*** listen to what adults ask of them.	☐	☐
223.	☐	☐	Some children are ***generally*** purposeful in their actions.	**BUT**	Some children are ***occasionally*** purposeful in their actions.	☐	☐
224.	☐	☐	Some children ***occasionally*** appreciate views that are different from their own.	**BUT**	Some children ***generally*** appreciate views that are different from their own.	☐	☐
225.	☐	☐	Some children ***occasionally*** express an interest in assisting the needy.	**BUT**	Some children ***frequently*** express an interest in assisting the needy.	☐	☐

226.	☐	☐	Some children ***frequently*** express compassion for those in pain.	**BUT**	Some children ***occasionally*** express compassion for those in pain.	☐	☐
227.	☐	☐	Some children are ***less*** social.	**BUT**	Some children are ***very*** social.	☐	☐
228.	☐	☐	Some children prefer participating in experiences alone than sharing with others.	**BUT**	Some children prefer sharing experiences with others than participating in the experience alone.	☐	☐
229.	☐	☐	Some children are ***frequently*** nice to their peers and/or siblings.	**BUT**	Some children are ***occasionally*** nice to their peers and/or siblings.	☐	☐
230.	☐	☐	Some children are ***occasionally*** witty.	**BUT**	Some children are ***frequently*** witty.	☐	☐
231.	☐	☐	Some children ***frequently*** cooperate with their friends and/or siblings.	**BUT**	Some children ***occasionally*** cooperate with their friends and/or siblings.	☐	☐
232.	☐	☐	Some children are ***very*** helpful.	**BUT**	Some children are ***occasionally*** helpful.	☐	☐
233.	☐	☐	Some children are ***generally*** trustworthy.	**BUT**	Some children are ***occasionally*** trustworthy.	☐	☐
234.	☐	☐	Some children ***occasionally*** lead their peers.	**BUT**	Some children ***frequently*** lead their peers.	☐	☐

Appendix D

Revised Preschool Strengths Inventory

Below are some statements that can describe children. We are interested in which choice best describes *your* child. If you have more than one child between the ages of 3 and 5, please complete the question thinking of *one* child. You can complete another survey and answer questions about your other child/children.

Sometimes you may find it hard to decide between the two choices; however, please answer each item. Once you decide which description is most like your child, please mark if you believe it is "really true" for your child or "sort of true." You will only mark one box for each item. There are no right or wrong answers and every child is unique, so please be honest in your answers.

There are multiple questions asking about the same characteristic. This is to help develop the final questionnaire.

Here is a sample question.

	Really True for my Child	Sort of True for my Child				Sort of True for my Child	Really True for my Child
0.	☐	☐	Some children prefer to play inside.	**BUT**	Some children prefer to play outside.	☐	☐

In this case, first decide whether you believe your child would prefer to play inside or if they would prefer to play outside. Once you decide between the two options, then decide if it is "really true" for your child or "sort of true" for your child.

For each of the items below, decide which description best describes your child and mark whether it is "really true" or "sort of true" for your child.

	Really True for my Child	Sort of True for my Child				Sort of True for my Child	Really True for my Child

1.			Some children are typically pessimistic.	**BUT**	Some children are typically optimistic.		
2.			Some children do not express much interest in learning new things.	**BUT**	Some children are eager to learn new things.		
3.			Some children are introverted.	**BUT**	Some children are very outgoing.		
4.			Some children are typically leaders.	**BUT**	Some children are typically followers.		
5.			Some children are ***occasionally*** enthusiastic.	**BUT**	Some children are ***frequently*** enthusiastic.		
6.			Some children have difficulty adapting to unfamiliar situations.	**BUT**	Some children are able to adapt to unfamiliar situations.		
7.			Some children shy away from setting goals.	**BUT**	Some children thrive on setting goals.		
8.			Some children ***cannot*** easily be depended on.	**BUT**	Some children can easily be depended on.		
9.			Some children often lead the group when playing.	**BUT**	Some children often go along with what the group is playing.		
10.			Some children do ***not*** enjoy setting goals for themselves.	**BUT**	Some children enjoy setting goals for themselves.		
11.			Some children like to arrange their toys.	**BUT**	Some children do ***not*** enjoy arranging their toys.		
12.			Some children can identify the emotions others are feeling.	**BUT**	Some children struggle to identify the emotions others are feeling.		
13.			Some children are ***occasionally*** responsible.	**BUT**	Some children are ***consistently*** responsible.		
14.			Some children have difficulty coming up with original ideas.	**BUT**	Some children often come up with original ideas.		

15.	☐	☐	Some children are ***not*** goal-orientated.	**BUT**	Some children are goal-orientated.	☐	☐
16.	☐	☐	Some children enjoy categorizing their toys or books.	**BUT**	Some children ***dislike*** categorizing their toys or books.	☐	☐
17.	☐	☐	Some children tend to decide what the group will play.	**BUT**	Some children tend to follow what the group is playing.	☐	☐
18.	☐	☐	Some children have difficulty meeting new people.	**BUT**	Some children find it easy to meet new people.	☐	☐
19.	☐	☐	Some children do ***not*** plan their course of action.	**BUT**	Some children carefully plan their course of action.	☐	☐
20.	☐	☐	Some children ***frequently*** help their peers and/or siblings.	**BUT**	Some children ***occasionally*** help their peers and/or siblings.	☐	☐
21.	☐	☐	Some children struggle when plans change.	**BUT**	Some children are comfortable when plans change.	☐	☐
22.	☐	☐	Some children enjoy spending time organizing their possessions.	**BUT**	Some children do ***not*** care to spend time organizing their possessions.	☐	☐
23.	☐	☐	Some children immediately assist others in need of help.	**BUT**	Some children may shy away from helping others in need.	☐	☐
24.	☐	☐	Some children ***occasionally*** work hard until they achieve their goal.	**BUT**	Some children ***frequently*** work hard until they achieve their goal.	☐	☐
25.	☐	☐	Some children are ***generally*** accepting of their peers, despite their differences.	**BUT**	Some children are ***occasionally*** accepting of their peers, despite their differences.	☐	☐
26.	☐	☐	Some children enjoy assisting their peers.	**BUT**	Some children find it less enjoyable to assist their peers.	☐	☐

27.	☐	☐	Some children are more difficult to trust with sensitive information.	**BUT**	Some children can be trusted with sensitive information.	☐	☐
28.	☐	☐	Some children ***frequently*** direct the group.	**BUT**	Some children ***occasionally*** direct the group.	☐	☐
29.	☐	☐	Some children in an unfamiliar situation have trouble adapting.	**BUT**	Some children in an unfamiliar situation adapt well.	☐	☐
30.	☐	☐	Some children are ***generally*** patient with others who have different ideas than they do.	**BUT**	Some children are ***occasionally*** patient with others who have different ideas than they do.	☐	☐
31.	☐	☐	Some children are ***frequently*** empathic.	**BUT**	Some children are ***occasionally*** empathic.	☐	☐
32.	☐	☐	Some children ***frequently*** make gifts to give to family and friends.	**BUT**	Some children ***occasionally*** make gifts to give to family and friends.	☐	☐
33.	☐	☐	Some children ***typically*** influence what the group will do.	**BUT**	Some children ***occasionally*** influence what the group will do.	☐	☐
34.	☐	☐	Some children ***occasionally*** light up when talking with others.	**BUT**	Some children ***frequently*** light up when talking with others.	☐	☐
35.	☐	☐	Some children enjoy organizing things.	**BUT**	Some children ***don't*** particularly enjoy organizing things.	☐	☐
36.	☐	☐	Some children ***frequently*** express compassion for those in pain.	**BUT**	Some children ***occasionally*** express compassion for those in pain.	☐	☐
37.	☐	☐	Some children are ***very*** helpful.	**BUT**	Some children are ***occasionally*** helpful.	☐	☐

Scoring:
From left to right, score 1-4 points.

The following items need to be reversed scored: 4, 9, 17, 28, 33 (all Leadership items); 11, 16, 22, 35 (all Organization items); 12, 20, 23, 25, 26, 30, 31, 32, 36, 37 (all Strengths of Agreeableness items).

Calculate the average for each factor.

Strengths are rank-ordered with the intent to focus on fostering the top strength.

Factors & Corresponding Items:
Strengths of Extraversion/Openness
1, 2, 3, 5, 6, 14, 18, 21, 29, 34

Strengths of Conscientiousness
7, 8, 10, 13, 15, 19, 24, 27

Strengths of Agreeableness
12, 20, 23, 25, 26, 30, 31, 32, 36, 37

Leadership
4, 9, 17, 28, 33

Organization
11, 16, 22, 35

Appendix E

Demographic Questionnaire

Your Age: _____

Your Child's Age: _____

Your Gender: _____ Male _____ Female

Your Child's Gender: _____ Male _____ Female

Does your child have a developmental disability (e.g., Autism, Asperger's, Down's Syndrome)

____ Yes ____ No

Does you child have siblings?

____ Yes ____ No

Your Race:

____ African American ____ Hispanic/Latino ____ Asian

____ Caucasian ____ Native American ____ Multiracial

_____ Other (Please specify): _____

Your Child's Race:

____ African American ____ Hispanic/Latino ____ Asian

____ Caucasian ____ Native American ____ Multiracial

____ Other (Please specify): _____

Your Level of Education:

_____ Less than High School _____ High School diploma/GED

_____ Bachelor's degree _____ Masters Degree

_____ M.D./Ph.D./J.D. _____ Other (Please Specify): _____

Appendix F

Informed Consent Letter

Title of Research Study: The Development of the Preschool Strengths Inventory
Principal Investigators: Rhea Owens, M.S. & Karen Multon, Ph.D.
Department of Psychology & Research in Education, University of Kansas, (785) 864-3931

Dear Parent/Guardian:

We are conducting a research project to develop a measure to identify preschool children's strengths. We are inviting all of the children who attend your child's preschool or extracurricular program to participate in the project. This research project is optional and is not sponsored by your child's preschool, extracurricular program, or school district. The following information is provided for you to decide whether or not you wish to participate in the study.

If you decide to participate, you will answer a number of questions about your child's behavior and preferences. There are no known risks associated with participation in this study, and the content of the questionnaires should cause no more discomfort to you than you would experience in everyday life. We believe the information obtained from this study will help us scientifically identify children's strengths and what they do well. There are no other direct benefits to you for participating in this study. This project is concerned only with the responses of the group as a whole and not the performance of individuals. Your responses will not be linked to your name or your child's names in any report of this research project.

Participation in this study is entirely voluntary. Your decision to participate or to withdraw from the study will not affect your or your child's present or future relationship with their preschool or extracurricular program or the University of Kansas. If you have any questions at all about the study, please call us—now or at any later time—at (785) 864-3931. If you have any further questions or concerns about this study, you may contact the Human Subjects Committee Lawrence Campus (HSCL) by phone at (785) 864-7385 or email at mdenning@ku.edu.

We hope that you will participate. By clicking on the button below and beginning the questionnaire indicates that you have read the information provided above and have decided to participate in the study. You may withdraw your consent to participate in this study at any time. You also have the right to cancel your permission to use and disclose information collected about you and your child, in writing, at any time, by sending your written request to: Karen Multon, Department of Psychology & Research in Education, University of Kansas, JRP 618, 1122 West Campus Dr., Lawrence, KS 66045. If you cancel permission to use your information, the researchers will stop collecting additional information about your child. However, the research team may use and disclose information that was gathered before they received your cancellation, as described above. You may print a copy of this consent form before beginning the questionnaire.

Sincerely,
Rhea Owens, M.S. & Karen Multon, Ph.D.

Appendix G

Table 1

Big Five Factors and Corresponding Lower-order Traits

Big Five Factor	Lower-order Traits
Neuroticism	Anxiety, Angry, Hostility, Depression, Self-consciousness, Impulsiveness, Vulnerability
Extraversion	Warmth, Gregariousness, Assertiveness, Activity, Excitement Seeking, Positive Emotions
Openness	Fantasy, Aesthetics, Feelings, Actions, Ideas, Values
Agreeableness	Trust, Straightforwardness, Altruism, Compliance, Modesty, Tender-mindedness
Conscientiousness	Competence, Order, Dutifulness, Achievement Striving, Self-discipline, Deliberation

Table 2

Strengths Identified from the Literature and the Focus Groups

Intrapersonal Strengths Identified from the Literature	Intrapersonal Strengths Identified from the Focus Groups
Extraversion	
Active	Adventurous
Enthusiastic	Charismatic
Positive	Positive
Openness	
Creative	Creative
Open-minded	Open
Flexible	Flexible
Curious	Curious
Agreeableness	
Modest	
Conscientiousness	
Focused	Focused
Goal-orientated	
Persistent	Persistent
Organized	Organized
Self-discipline	Responsible
Deliberative	Planful
Trustworthy	
Neuroticism	
Calm	

Table 2 (continued)

Interpersonal Strengths Identified from the Literature	Interpersonal Strengths Identified from the Focus Groups
Accepting*	
Altruistic	
Empathic*	Empathic*
Gregarious**	Gregarious**
Generous*	Generous*
Warm	Caring
Humorous	Humorous
Cooperative	
Helpful*	Helpful*
Trustworthy***	
Leadership**	Leadership**

* Can also fall under the personality trait of Agreeableness.
** Can also fall under the personality trait of Extraversion.
*** Can also fall under the personality trait of Conscientiousness.

Cognitive Strengths Identified from the Focus Groups	Physical Strengths Identified from the Focus Groups
Language Ability	Athletic
Problem Solving/Reasoning	Coordinated
Memory	
Visual Spatial Skills	

Table 3

Independent Samples t-tests

Variable	*t*	df	*p*-value
Parent Age	1.44	272.10	.15
Child Age	.08	299.77	.94

Table 4

Chi Square Tests

Variable	X^2	N	df	*p*-value
Parent Gender	.00	302	1	1.00
Child Gender	1.61	302	1	.21
Parent Race	2.77	302	5	.74
Child Race	5.83	302	5	.32
Parent Education	3.28	302	5	.657

Table 5

Preschool Strengths Inventory Items, Factor Loadings, Means, and Standard Deviations

Factor/Item	Factor Loadings					M	SD
Strengths of Extraversion/Openness							
…are very outgoing	**.83**	-.07	-.08	-.01	.11	3.21	.97
…in an unfamiliar situation adapt well	**.81**	.11	-.04	.01	.03	2.93	.94
…find it easy to meet new people	**.71**	-.08	-.08	-.03	.06	3.05	1.00
…are comfortable when plans change	**.71**	.21	.03	-.08	-.03	2.73	.97
…are ***frequently*** enthusiastic	**.69**	-.10	.11	-.00	-.17	3.23	.94
…are able to adapt to unfamiliar situations	**.68**	.09	-.10	.05	-.01	2.75	1.02
…are eager to learn new things	**.66**	.04	.06	.18	.00	3.38	.89
…***frequently*** light up when talking with others	**.61**	.04	.02	.02	-.03	2.98	1.12
…often come up with original ideas	**.58**	.05	.07	.20	-.13	3.23	.89
…are typically optimistic	**.54**	-.16	.01	.13	.04	3.13	.90
Strengths of Conscientiousness							
…are goal-orientated	-.01	**.92**	-.08	.07	.06	2.96	.77
…enjoy setting goals for themselves	.05	**.77**	.13	-.04	.07	2.87	.84
…***frequently*** work hard until they achieve their goal	-.06	**.68**	-.11	.03	.04	2.86	.90

Table 5 (continued)

Factor/Item	Factor Loadings					M	SD
…thrive on setting goals	.01	**.68**	.08	-.09	.13	2.79	.84
…can be trusted with sensitive information	.03	**.58**	.05	-.13	-.01	2.75	.88
…are ***consistently*** responsible	-.07	**.58**	.12	.02	-.14	2.60	.83
…can easily be depended on	.11	**.56**	.24	-.13	-.11	3.13	.80
…carefully plan their course of action	.02	**.50**	-.16	.12	-.13	2.66	.87
Strengths of Agreeableness							
…***frequently*** express compassion for those in pain	.07	-.19	**.82**	-.10	.04	3.07	1.03
…are ***very*** helpful	.02	.05	**.81**	.10	-.11	3.07	1.06
…are ***frequently*** empathic	-.16	-.05	**.81**	-.01	-.04	3.03	.94
…enjoy assisting their peers	.02	.05	**.76**	.01	.17	3.19	.88
…immediately assist others in need of help	-.10	.06	**.72**	.06	.10	2.95	.92
…***frequently*** help their peers and/or siblings	-.12	.13	**.67**	.09	.04	3.05	.97
…***frequently*** make gifts to give family and friends	.04	.06	**.67**	.00	.01	2.99	1.09
…can identify the emotions others are feeling	-.01	.06	**.65**	.04	-.01	3.28	.84
…are ***generally*** accepting of their peers, despite their differences	.10	-.14	**.61**	-.00	.21	3.17	1.01
…are ***generally*** patient with others who have different ideas than they do	-.08	-.03	**.57**	.02	.03	2.76	.94

Table 5 (continued)

Factor/Item	Factor Loadings					M	SD
Organization							
…enjoy spending time organizing their possessions	-.06	-.08	.01	**.89**	-.02	2.46	.94
…enjoy organizing things	.05	.02	.05	**.88**	.01	2.58	.98
…like to arrange their toys	.05	.03	.05	**.86**	.01	2.85	1.05
…enjoy categorizing their toys or books	.03	-.05	-.05	**.84**	.02	2.83	.98
Leadership							
…often lead the group when playing	.04	-.04	.04	-.05	**.90**	2.77	.98
…are typically leaders	-.01	.10	-.13	.06	**.82**	2.90	.90
…tend to decide what the group will play	-.00	.01	.07	-.07	**.77**	2.66	.92
…***typically*** influence what the group will do	-.06	-.08	.08	.02	**.72**	2.75	.96
…***frequently*** direct the group	.00	.05	.06	.09	**.72**	2.64	.98

Table 6

Exploratory Factor Analysis Factors and Corresponding Fit Statistics

# of Factors	CFI	TLI	RMSEA	SRMR	Chi-Square	*p*-value
4	.85	.81	.08	.08	981.58	< .001
5	.92	.90	.06	.05	728.69	< .001
6	.94	.92	.05	.05	635.37	< .001

Table 7

Percent of Variance Accounted for by Each Factor

Factor	% of Variance
Strengths of Extraversion/Openness	21.12
Strengths of Conscientiousness	14.24
Strengths of Agreeableness	11.15
Organization	8.23
Leadership	6.22

Table 8

Confirmatory Factor Analysis Fit Statistics

# of Factors	CFI	TLI	RMSEA	Chi-Square	*p*-value
5	.90	.89	.06	905.64	< .001

Table 9

Revised Preschool Strengths Inventory Items, Estimates, Means, and Standard Deviations

Factor/Item	Estimates	S.E.	M	SD
Strengths of Extraversion/Openness				
…are able to adapt to unfamiliar situations.	.77	.04	2.69	.92
…find it easy to meet new people.	.74	.05	2.91	1.02
…***frequently*** light up when talking with others.	.73	.05	3.09	1.07
…***frequently*** enthusiastic.	.71	.05	3.25	1.03
…in an unfamiliar situation adapt well.	.68	.05	2.71	.85
…are typically optimistic.	.66	.05	3.23	.80
…often come up with original ideas.	.63	.06	3.15	.89
…eager to learn new things.	.57	.08	3.40	.81
…are very outgoing.	.45	.07	3.13	.95
…are comfortable when plans change.	.44	.06	2.65	.95
Strengths of Conscientiousness				
…are goal-orientated.	.86	.03	2.75	.76
…enjoy setting goals for themselves.	.79	.04	2.81	.76
…carefully plan their course of action.	.69	.06	2.58	.84
…thrive on setting goals.	.68	.04	2.81	.77
…can easily be depended on.	.67	.05	3.07	.79

Table 9 (continued)

Factor/Item	Estimates	S.E.	M	SD
…***frequently*** work hard until they achieve their goal.	.62	.06	2.66	.91
…can be trusted with sensitive information.	.60	.06	2.60	.83
…***consistently*** responsible.	.54	.07	2.57	.91
Strengths of Agreeableness				
…immediately assist others in need of help.	.81	.04	2.91	.87
…can identify the emotions others are feeling.	.78	.04	3.23	.86
…enjoy assisting their peers.	.76	.04	3.17	.84
…frequently empathic.	.74	.05	2.99	.96
…***frequently*** express compassion for those in pain.	.72	.05	3.03	.95
…frequently help their peers and/or siblings.	.72	.05	2.96	.99
…***generally*** accepting of their peers, despite their differences.	.65	.06	3.30	.87
…are ***very*** helpful.	.64	.05	3.07	.95
…***generally*** patient with others who have different ideas than they do.	.55	.06	2.77	.86
…***frequently*** make gifts to give family and friends.	.55	.06	2.92	1.06

Table 9 (continued)

Factor/Item	Estimates	S.E.	M	SD
Leadership				
…often lead the group when playing.	.87	.03	2.54	1.00
…are typically leaders.	.79	.04	2.85	.92
…***frequently*** direct the group.	.79	.04	2.65	.95
…tend to decide what the group will play.	.75	.04	2.58	.98
…***typically*** influence what the group will do.	.75	.04	2.73	.92
Organization				
…enjoy categorizing their toys or books.	.90	.03	2.58	1.02
…enjoy organizing things.	.86	.03	2.34	.92
…like to arrange their toys.	.80	.04	2.70	1.05
…enjoy spending time organizing their possessions.	.77	.04	2.26	.96

Table 10

Internal Consistency

Factor	Cronbach's Alpha (EFA Sample)	Cronbach's Alpha (CFA Sample)	# of Items
Strengths of Extraversion/Openness	.87	.84	10
Strengths of Conscientiousness	.82	.83	8
Strengths of Agreeableness	.89	.86	10
Organization	.89	.86	4
Leadership	.87	.86	5

Appendix H

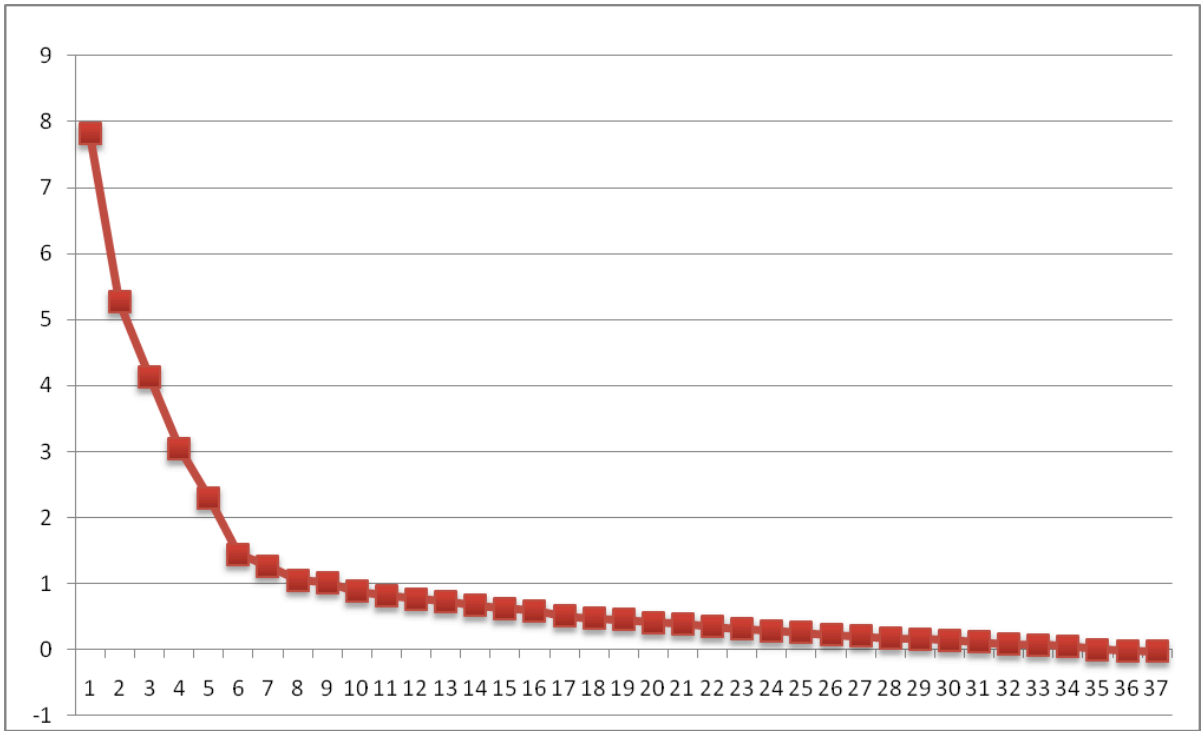

Figure 1. Exploratory Factor Analysis Scree Plot